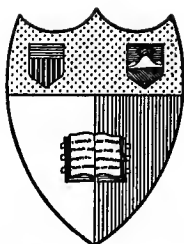


HE
1051
V98



Cornell University Library

Ithaca, New York

BOUGHT WITH THE INCOME OF THE
FISKE ENDOWMENT FUND
THE BEQUEST OF
WILLARD FISKE

LIBRARIAN OF THE UNIVERSITY 1886-1888
1905

The date shows when this volume was taken.

To renew this book copy the call No. and give
to the librarian.

~~21 JAN 1962~~

HOME USE RULES

~~007 22 1961 L O~~

All Books subject to recall

All borrowers must register in the library to borrow books for home use.

All books must be returned at end of college year for inspection and repairs.

Limited books must be returned within the four week limit and not renewed.

Students must return all books before leaving town. Officers should arrange for the return of books wanted during their absence from town.

Volumes of periodicals and of pamphlets are held in the library as much as possible. For special purposes they are given out for a limited time.

Borrowers should not use their library privileges for the benefit of other persons.

Books of special value and gift books, when the giver wishes it, are not allowed to circulate.

Readers are asked to report all cases of books marked or mutilated.

~~MAY 14 1966 M P~~

Do not deface books by marks and writing.

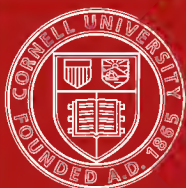
Cornell University Library
HE 1051.V98

American railway problems in the light o



3 1924 020 754 739

olin



Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

AMERICAN RAILWAY PROBLEMS

IN THE LIGHT OF EUROPEAN
EXPERIENCE

OR

GOVERNMENT REGULATION

vs.

GOVERNMENT OPERATION OF
RAILWAYS

BY

CARL S. VROOMAN

HENRY FROWDE

OXFORD UNIVERSITY PRESS

LONDON, EDINBURGH, NEW YORK, TORONTO
AND MELBOURNE

A. 529212

OXFORD: HORACE HART
PRINTER TO THE UNIVERSITY

TO
MY FATHER

PREFACE

THE purpose of this work is to present the broader economic, political and social aspects of our railway problem, while leaving in the background those technical and administrative questions which must remain largely the same, whether we adhere to our present policy of Government regulation or decide to embark upon a régime of public ownership and management.

While maintaining that our present experiment with State and Federal regulation should be tried out energetically and thoroughly, so as to bring it to the most successful attainable issue, at the same time I have endeavoured to make clear that the alternative of Government ownership, if brought about in a conservative and businesslike way, is very far from constituting the dangerous possibility which many railway apologists and others would have us consider it. As a matter of fact, in view of the indisputable success of State railways in Continental Europe, the assumption that we are constitutionally incapable of achieving similarly happy results would seem more like an interested prejudice or an exploded superstition than like a sound deduction from known facts.

A careful analysis has been made of various methods of railway nationalization, with a view to our avoidance in the future of anything like hasty and ill-considered

action, or unbusinesslike and unjust procedure, while a detailed account has been given of the powerful recent trend in Government railway circles, away from administrative red tape and inelasticity, and toward administrative autonomy, adaptability, and economic efficiency.

It was the original intention to treat the general subject of railway transportation by countries, as various other writers already had done, but upon mature consideration it was thought best to adopt the plan of taking up, one at a time, our most important and least understood railway problems, in order to focus upon each of them whatever light could be gained from the combined experience of the several European countries investigated. According to the method first contemplated, all the data conveniently obtainable at first or second hand, concerning each country, could have been joined together, for better or for worse, in the chapter devoted to that particular country. But when the particular railway problems, which seemed most vitally important, and which for one reason or another had received least satisfactory treatment from economic writers in the past, were singled out for special consideration, it was found that quantities of data already collected, would have to be discarded as not coming within the new limits assigned to the discussion, and that certain additional facts, some of them widely scattered and securely hid away in Government documents, would be absolutely indispensable to any real understanding of the questions at issue. As a consequence the adoption of the present plan, while reducing the size of the book by nearly one-half, has practically doubled the amount of work involved in the writing of it. Doubtless the reader will

feel no regret at the absence of such heterogeneous historical and economic facts as thus have been weeded out, and as for the writer, he can but consider himself more than repaid for the additional work done, if by means of it there have been gained any increased definiteness and conclusiveness of treatment of the problems under discussion.

For permission to reprint magazine articles, acknowledgements are due to the editors of *The Twentieth Century Magazine* and *McClure's Magazine*.

I desire to make special mention of my indebtedness to Professor Edgard Milhaud, of the University of Geneva, to M. F. Vanderrydt, of Brussels, Chief Engineer of Material and Traction of the Belgian State railways, and to Ing. Filippo Tajani, Chief Inspector of the Italian State Railways at Genoa, for their invaluable counsel and assistance during my investigations of European railway conditions and problems. Acknowledgements are due also to Dr. M. O. Lorenz, of the Census Bureau, Washington, D.C., who kindly read the book in manuscript and made many useful criticisms and suggestions, and to Mr. M. L. Jacobson, of the Bureau of Statistics, Washington, D.C., for his painstaking help with various translations of laws and other public documents as well as for important data furnished by him concerning Russian railways.

CARL VROOMAN.

OXFORD
July 1910

CONTENTS

CHAP.	PAGE
INTRODUCTION : THE SUSPENDED SENTENCE OF NATIONALIZATION	1
1. RAILWAY REGULATION BY THE SEVERAL STATES	10
2. PRESENT STATUS OF FEDERAL REGULATION .	33
3. PROPOSED REFORMS IN FEDERAL REGULATION .	46
4. VARIETIES OF RAILWAY REGULATION . .	66
5. GOVERNMENT OWNERSHIP NOT CONFISCATORY .	98
6. RESULTS OF GOVERNMENT OWNERSHIP . .	121
7. RESULTS OF GOVERNMENT OWNERSHIP (<i>continued</i>)	135
8. RESULTS OF GOVERNMENT OWNERSHIP (<i>continued</i>)	159
9. CAN AMERICANS AFFORD SAFETY IN RAILWAY TRAVEL ?	182
10. THE ULTIMATE ISSUE INVOLVED IN RAILWAY ACCIDENTS	205
11. EUROPEAN RAILWAY CORRUPTION . . .	218
12. AMERICAN RAILWAY CORRUPTION . . .	235
13. THE SPOILS SYSTEM AND STATE RAILWAYS .	265
14. THE INDUSTRIAL STATE	277
15. FINAL CONSIDERATIONS	292

APPENDICES

I. LAMARTINE'S WARNING	299
II. FEDERAL LAW ON SYSTEM OF ACCOUNTING FOR SWISS RAILWAYS (DECEMBER 21, 1883) .	301
III. FEDERAL LAW ON METHODS OF ACCOUNTING FOR SWISS RAILWAYS (MARCH 27, 1896) .	305
IV. FEDERAL LAW AS TO ACQUISITION, OPERATION AND ORGANIZATION OF THE SWISS FEDERAL RAILWAYS (OCTOBER 15, 1897)	315
V. LAW AS TO STATE OPERATION OF ITALIAN RAIL- WAYS (JULY 7, 1907)	332

INTRODUCTION

SLOWLY, but surely, the more intelligent among our citizens are coming to recognize that the only solution for our railway problem lies in the working out for ourselves of the most effective possible system of railway regulation, while at the same time taking the precaution to make gradual preparation for that consummation which all serious students of the subject recognize to be at least possible, and which most authorities, even when opposed to it theoretically, recognize as the most probable *ultimate* solution of the transportation problem, i. e. public ownership and operation.

Unquestionably the present position of the Government would be stronger if it could say to the corporations: 'We hope to make a success of Government regulation and ask for your loyal co-operation with our efforts in that direction, but while carrying on this important experiment, we are going to make the most searching inquiry into the whole transportation question that has ever been made, and as soon as it becomes evident that Government regulation is inefficient, or even insufficient, we shall not hesitate to propose more effective action.'

The more carefully and the more deeply a man has gone into the study of this question, the less apt he will be to advocate any undue hastening of the process of railway nationalization; but on the other hand, the

more thorough his mastery of the subject, the more likely he will be to realize, first that the refusal of the reactionaries to recognize the facts concerning certain vital phases of this subject is quite as dangerous to the cause of social order as is the fanatical half-knowledge and ill-timed haste of some of our radicals, and secondly that the only cure for either or for both of these evils lies in the prompt presentation to our people of a generous diet of thoroughly authenticated economic facts.

Practically all serious students of this problem recognize that there exists to-day among the masses of our people a widespread and deep-seated sentiment in favour of public ownership, which a grave economic crisis may crystallize at any time into an irresistible demand for railway nationalization. A quarter of a century ago President Hadley of Yale, in the closing words of his well-known and eminently conservative volume on *Railroad Transportation*, called attention to the unmistakable trend of public sentiment in this direction, and the lapse of time since he uttered this warning has only served to accentuate the tendency which even then he fully recognized and deplored.

‘There is,’ he said, ‘a strong popular feeling, to a large extent unsuspected by those in authority, in favor of Government ownership of railroads as a system. No one can have much to do with the more thoughtful working-men without finding how strong that feeling is, and what hopes are based upon it. The fact that the question is not now under discussion must not blind us to the fact that forces are at work which may prove all but revolutionary when the question actually does come under discussion.’

If it be true that Government railroad ownership would be a most serious political misfortune for the United States, we must be prepared to meet the danger with our eyes open. Unless we are able to face it intelligently, and to show reason for our action, the widespread feeling in its favor will prove too strong for us. It may not come for many years ; but the lessons of the Granger movement show plainly enough what forces will lie behind it when it does come.'

That a similar state of affairs exists in Great Britain, the only other first-class power which still holds firmly to a policy of private ownership and management of its transportation facilities, is borne out by a recent statement by Mr. W. M. Acworth, the ablest conservative railway authority in England, to the effect that :

'English railways are to-day in a critical situation—a situation from which the only ultimate escape, in my judgment, will be by way of State purchase.'¹

A rather surprising change of attitude on the part of American railway interests is shown by the following editorial from the *Railway World* :²

'President W. W. Finley, in his thoughtful and suggestive address before the New York Traffic Club, made one remark which we earnestly commend to the attention of railway stockholders and officials. After showing that the growth of the transportation system of the country must anticipate and further its continued economic development, and that the present tendencies of public regulation, if allowed to operate, would be to cripple private enterprise in the railway field, President Finley said : "I do not believe that the sentiment of the majority of the people of the

¹ *The North American Review*, September 1909, 371 : 'The Position of English Railways.'

² March 13, 1908.

United States is favorable to Government ownership, nor do I believe that Congress and our State legislatures are consciously moving in that direction, but I do believe that if some of the more extreme legislation already enacted is supplemented along the lines now proposed the ultimate result must be to break down the system of private ownership."

'We hope that President Finley in some subsequent address will enlarge on this subject. Government ownership of railroads, long regarded as a dream of the impractical radical is rapidly looming into view as an impending change far reaching and fundamental in the structure of our economic life. *Government ownership of railroads is the inevitable consequence of the present system of regulation* which is developing, as President Finley says, into the scheme of irresponsible public management by boards and commissions which will "practically leave little to the owners of the property but the privilege of providing the capital necessary for construction and operation, and liability for heavy damages and attorney's fees in every case of failure to maintain the required standard of service, and for penalties in amounts which might easily absorb a very large proportion of the gross earnings of a company rendering the most efficient service in its power."

'We seriously question whether public ownership would not be better than the system of public regulation which President Finley so graphically describes. True, it would seriously impair the efficiency of our transportation system, perhaps to the extent of forcing a large amount of traffic on to the otherwise to be neglected rivers and canals; it would also make the railway policies of the country the subjects of political controversy. . . .

'There is, however, another side to the picture. Under Government ownership, the stockholders and creditors of the railroads would exchange their holdings for Government bonds, and they would be sufficiently influential to protect themselves from any serious injustice in the terms of

exchange. They would then turn over the management of the railroads to the Government officials, freeing their long-endangered capital for entrance into safer lines of employment and leaving the country to struggle with a set of "problems" far more serious and difficult than even the tariff and the currency questions.

'Why should the owners of American Railway Companies resist the trend toward Government ownership? They will suffer no damage in the transfer. The courts can be relied on to protect their rights. They will be freed from further worry and annoyance. To them at least, if not to the shipper, the change will come like a cool and refreshing shower at the close of a hot and sultry day. We recommend to the attention of railway owners the careful consideration of this matter. We would even go so far as to suggest that they become active in support of the public ownership propaganda, and meanwhile that they refrain from further investment in railway development. Even if their advocacy of the strange doctrines of socialism may not succeed, their refusal to invest further in a business which they are not allowed to control, may furnish a needed object lesson to the advocates of railway regulation.'

In harmony with the above statement is the following declaration by a former Secretary of State, Mr. Richard Olney, in a letter to the *New York World*:¹

'Democrats, it is urged, should not vote for Bryan because he has declared for Government ownership of railroads if Government regulation proves a failure, as he thinks it will. This declaration, wholly unnecessary and from the view-point of his political fortunes decidedly detrimental, has the redeeming feature of demonstrating that Bryan at least has the courage of his conviction. With this position of Bryan—which is certainly open and square—compare the position of the Roosevelt and Taft com-

¹ September 17, 1908.

bination. It professes hostility to Government ownership of railroads. Yet, notwithstanding its professions, it is at the same time doing the things and advocating the things which lead straight to Government ownership and, indeed, make it inevitable. But when a Government gets so far as to dictate the prices a corporation may charge for what it sells and to fix the capital it may invest in its business, and prescribe the securities by which that capital is to be raised, Government ownership has in effect arrived. Private owners in such a case, on the most elementary principles of justice, are entitled to insist that the Government shall relieve them of the risks of the business and assume them itself—that is, shall take over and pay for property in respect of which Government has deprived them of the essential elements of ownership.

‘The situation then is this. As a matter of theory, Bryan favors Government ownership of railroads upon the anticipated failure of Government regulation. As a matter of practice, Roosevelt and his disciple, Taft, are favouring a kind and degree of Government regulation of railroads which makes Government ownership of railroads both logical and imperative.’

The attitude of another important category of men, which includes Mr. Roosevelt, was expressed by Senator Lodge in a letter to the Boston *Herald* in response to the above letter of Mr. Olney’s in support of Mr. Bryan. Senator Lodge said :

‘Mr. Olney is opposed to the president and to Mr. Taft because he says that their policy of regulating great interstate corporations leads to Government ownership. The curse of Government ownership may be forced upon us, but the only way in which its coming can be arrested is by Government regulation. The people of the United States, without regard to party, will no longer suffer great interstate corporations to go uncontrolled, and will no longer endure

the efforts of those corporations, very often corrupt efforts, to manage and direct Congress and the administration. If the people cannot have what they believe to be a proper Governmental regulation and supervision, they will take possession of the corporations themselves. It is Mr. Roosevelt's policy, which Mr. Taft will carry out, which has thus far prevented Government ownership, and which in my judgment will continue to prevent it.'

The same idea was more briefly and more forcibly stated by Senator Clay of Georgia in a speech in the United States Senate on January 22, 1906. He said :

' Let me say to you now that public sentiment in favor of Government ownership is growing every day. I am not in favor of it, but unless you check it by Government regulation you will watch it grow and continue to grow.'

Differing as they do on other matters, ALL of the gentlemen above quoted are in complete agreement in their belief, *that, unless during the next few years our railway question is handled in a more satisfactory way than it has been up to date, Government ownership is inevitable.*

But interesting as is this striking and authoritative prognostication, it is not the most important feature to be noted in connection with the present railway situation in the United States.

Whatever weight we may or may not attach to the opinions of these eminent railway specialists and statesmen, the facts of the case which are absolutely beyond dispute are these. During the first half-century after the introduction of railways into the country, the American people carried on a thoroughgoing experiment which resulted in furnishing them with a complete

demonstration of the unsatisfactory nature of a transportation system run in accordance with the principle of *laissez-faire*, or no regulation. About twenty-five years ago upon awaking to a realization of the decisive nature of this demonstration, they set about trying to work out an efficient and satisfactory system of Government regulation. It is this plan which we are now in process of perfecting, and hope soon to bring to the highest attainable state of efficiency. But whether or not our system of regulation, even at its best, will prove to be permanently satisfactory is an open question. If it does so prove, the American people will be able to congratulate themselves upon having succeeded in doing something which no other nation has yet done ; and if it does not, they will have the satisfaction of knowing that they have worked their way one step nearer to a solution than they were before. For no matter what our personal predilections or theories in the matter may be, it necessarily follows in accordance with the simple process of mathematical elimination, that if we fail in our efforts to work out a satisfactory system of regulation, our only remaining alternative will be the plan of Government ownership. It thus becomes perfectly clear that, *not by force of any legislative enactment or judicial decree which can be reversed or set aside by a higher court, but in accordance with the resistless trend of events, over which neither politicians nor magnates nor even Supreme Court Judges, have any control, the railways of the country to-day are being operated under a suspended sentence of nationalization.*

This comparatively new form of judicial procedure

called the 'suspended sentence' is oftenest applied in the cases of drunkards or other petty offenders. The theory is, that if the delinquent should be sent to jail, the heaviest punishment would fall not upon him but upon his starving family. Therefore, the judge not only gives him another chance but also does everything in his power, even to utilizing the moral stimulus of a sentence dangling menacingly over his head, to encourage him to brace up and make a man of himself.

While some of our railways can hardly be called *petty* offenders, at the same time the situation of the public is strikingly similar to that of the families of these delinquents, in whose behalf this new and successful principle in jurisprudence has been invoked.

Upon the continued well being and constant development of our railways depends the prosperity and happiness of the entire country. Let them then be regulated not in a spirit of vengeance but wisely and temperately. If, as in France, they are restricted and circumvented and tied up too closely, all the commercial and industrial interests which are dependent upon them will suffer. Let us therefore by all means allow them as much liberty of action as is consistent with fair play,—but at the same time take such steps as will make absolutely plain to such of them as do not yet realize the practically automatic nature of their 'suspended sentence', *that if the liberty which is necessary to their continued economic efficiency is abused* this 'suspended sentence' of nationalization cannot possibly be warded off,—that 'On their own heads, in their own hands, the sin and the saving lies'.

CHAPTER I

RAILWAY REGULATION BY THE SEVERAL STATES

THERE exists at present in the public mind a regrettable confusion of thought concerning the problem of railway regulation by the several states. Many reactionaries and socialists are agreed in holding that all attempts at such regulation are vain, vicious or both. And while no other considerable element in the community can be said to be positively opposed to this form of 'state interference' with the industrial tyranny of railway corporations, at the same time a very large percentage of our population is in a state of uncertainty as to the practical value of such regulation. As a matter of fact, during the last two or three years there has been a growing demand in various quarters for a transfer to the Federal Government of all powers of railway regulation now exercised by the individual states.

Mr. Stuyvesant Fish, a prominent railway magnate, recently said :

'When Congress took over the supervision of railroads by passing the Act of 1887, it expressly excepted from the provisions of that law transportation "wholly within one state". That Congress will eventually have to regulate this as well, seems to me inevitable, even though many believe a constitutional amendment necessary to that end.'

Judge Charles F. Amidon, in his address before the American Bar Association at Portland, Maine, in 1907,

made a strong argument in favour of this change, and a number of other statesmen, economists, and railway magnates, have taken the same position. That powerful arguments can be made in behalf of this federalistic view of railway regulation is apparent. The evils complained of are manifest and unmistakable, and many of the complications and difficulties, legal, economic, and material, which constantly are arising in connection with our dual form of regulation, seem apparently to be inherent in the system itself. Thus in the last analysis, the question at issue seems to be not whether our present system of regulation is faulty, but whether or not other and even greater evils would not just as inevitably arise in connection with a system of purely federal regulation.

For over a quarter of a century the policy of railway regulation by the several states has been under a cloud; firstly, because during this entire period, it has been growing steadily clearer that unless supplemented by an equally efficient system of interstate regulation, the most effective possible state regulation could never hope to achieve anything even approaching satisfactory results; and secondly, because of the false and utterly unfounded notion, which for almost a quarter of a century passed current among orthodox economists, to the effect that the so-called 'Granger legislation' of the early seventies had crippled the then existing railways, retarded railway construction, and thus seriously injured the business and agricultural interests of the states in which it was enacted.¹ Con-

¹ See *Railroad Transportation*, A. T. Hadley, p. 135.

cerning this only very recently exploded superstition, Professor Emory R. Johnson, of the University of Pennsylvania, says : ¹

‘It so happened that most of the Granger laws were passed during the five or six years of serious business depression which followed the panic of 1873. For that reason it was not difficult for those opposed to the laws to establish the contention that the laws had brought about a serious business condition in the railroad world. I do not think any considerable number of impartial students of economic history would now assert that the Granger laws had very much to do with the embarrassment of the railroads from 1873 to 1879. The railroads, like other forms of business activity, suffered from the conditions of the time. To some extent those laws might have contributed to the unhappy condition of the railroads, but the misfortunes of the railroads in the seventies were due primarily to their over speculation in the past, and to the general business situation prevailing in this country from 1873 to 1879.’

Speaking of the results of Iowa railway regulation Professor F. H. Dixon said : ²

‘It was charged by the railroads, that the statute reduced the rates to so low an average that it was impossible to do a profitable business under them. What the legislature actually did was to equalize rates, bringing the average to a higher point than it had been under the discriminating charges established by the railroads themselves.’

A few years ago, Senator La Follette, while carrying on his famous contest in favour of the creation of the Wisconsin Railroad Commission, made the most careful and detailed investigation of this subject that has ever

¹ *Annals of the Academy of Political and Social Science*, July 1908, p. 121.

² *State Railroad Control*, p. 27.

been made. During the course of this campaign, he said :¹

‘THE “POTTER LAW” AND FREIGHT RATES

‘But let us probe this matter to the bottom. Let us analyse the rates fixed by the Potter law in March, 1874, and see how much reduction the statute would actually have made in Wisconsin freights, had it been complied with by the railroads. . . .

‘An examination of the rates thus fixed by the Potter law, and the rates actually charged by the C., M. & St. P. Railway and by the C. & N. W. Railway during the period covered by the law, shows that the rates as fixed by the Potter law were much the highest.

‘In 1875, for instance, the average rate per ton per mile, actually charged by the two principal roads in Wisconsin, was 2.10 cents per ton per mile. Compare this with the following figures, which represent very closely the average rates under the Potter law :

‘RATE IN CENTS PER TON PER MILE

Class 1, merchandise, less than carloads	.	.	11.62
Class 2, " " " "	.	.	9.83
Class 3, " " " "	.	.	8.30
Class 4, " " " "	.	.	6.80
Class D, carloads, grain	.	.	3.30
Class E, carloads, flour	.	.	3.30
Class F, carloads, salt, cement, lime, &c.	.	.	2.20
Class G, carloads, lumber, shingles, &c.	.	.	2.07
Class H, carloads, livestock	.	.	2.85
Class I, carloads, agricultural implements, wagons, &c.	.	.	3.50

‘These figures were computed from the rates for the 25, 50, 100, 150, and 175 mile distances, as fixed in the Potter law, and are the average of those distances.

¹ Speech at Milton Junction, January 29, 1904.

'As the longest haul of the Chicago, Milwaukee and St. Paul Railway in the state was only 196 miles, and as the average distance between all the stations on the line and Milwaukee was only 85 miles, these compilations are certainly fair to the roads.

'There is only one rate in the table just presented as low as that actually charged by the road. This rate is on lumber, which stands at 2·07 cents per ton per mile.

'That the Potter law figures indicate a much higher average rate than 2·10 cents per ton per mile, the average rate actually charged by the roads, is too plain for discussion. It becomes at once apparent that the railroads continued to violate the law with respect to discriminations. While the farmers and small shippers were paying the highest rates under the law, favoured shippers had much lower rates than those fixed by the law; otherwise the average would not have been reduced to the low level of 2·10 per ton per mile. . . .

'DISCRIMINATION IN PASSENGER TRAFFIC

'What is true of the freight traffic is equally true of the passenger traffic. An abolition of the discrimination so widely made in free transportation, for political and other reasons, would have made the rate then fixed at 3 cents per mile by the Potter law, a better rate than that actually received by the roads. In other words, if honestly accepted and applied to their business, the Potter law, in both branches of traffic, would have resulted in much greater revenues than the railroads actually received.'

'But,' continued Senator La Follette, 'if the Potter law and the legislation of the other Granger states did not reduce transportation charges and so cause shrinkage in the revenues of the railroads, why was it that "railway construction at once came to a standstill and all work on projected lines at once ceased"? This has always been one of the final arguments against further legislation to control railway rates, a sort of "clinch", so to speak.'

By a careful analysis of railway statistics for this period he then went on to demonstrate that, as a matter of fact, railway construction in the Granger states not only did not 'come to a standstill' but actually was carried on more rapidly in them than in the surrounding states, or in the Middle Atlantic states, or in the Southern states, or in the United States as a whole. He summed up his detailed statistical statement as follows :

' If we take the mileage for 1873, the year which immediately preceded the legislation, and compare it with the railroad mileage in 1875, the last year of the Granger period, we will find the following per cent of increase for the period : Wisconsin alone, 9 per cent ; the four Granger states, including Wisconsin, 6.1 per cent ; the four adjoining states, 4.1 per cent ; Atlantic states, 5.9 per cent ; the Southern states, 2.4 per cent ; and the United States as a whole, 5.5 per cent.'

As to the supposed shrinkage in the gross earnings of railways in the Granger states during this period, he said :

' Railroad presidents, their managers, their advocates and supporters, all asserted at the time, and have ever since maintained, that there was a great shrinkage in the earnings of the railroads as a result of the Granger legislation.

' THE OTHER SIDE OF THE QUESTION

' On the other side of the question, little if anything has been said. Few seem to have thought it worth while to search the records and examine the facts closely. I have investigated the earnings, however, for three of the Granger states, three of the adjoining states, the Middle Atlantic

and Southern groups of states as well as for the country as a whole, and submit the following :

‘ While there was a slight decrease in gross earnings in the Granger states during the two Granger years, *this decrease was smaller in those states than in the adjoining states*, or any of the other groups, and was not due to the Granger laws, but to causes that operate, not in one state alone, but throughout the whole country. I place before you the results of this investigation upon which I base my conclusions in the following table :

‘ TOTAL GROSS EARNINGS IN 1871, 1873, 1875, AND 1880

Years.	Wisconsin, Illinois, Iowa.	Michigan, Indiana, Missouri.	Middle Atlantic States.	Southern States.	United States.
1871	\$54,994,114	\$44,433,246	\$147,130,494	\$41,772,102	\$403,329,208
1873	\$70,027,777	\$59,106,865	\$194,052,302	\$53,696,409	\$526,419,935
1875	\$69,621,065	\$54,731,069	\$175,677,418	\$50,099,227	\$503,065,505
1880	\$86,954,346	\$79,038,920	\$199,003,718	\$48,317,754	\$615,410,931

‘ This table discloses additional matter of great importance to this discussion. We find that the gross earnings decreased in the Granger states during the period covered by Granger legislation, that is from 1873 to and including 1875. For the three Granger states, however, this was in the trifling amount of \$406,000. Nearly one-half of this was for Wisconsin, and the other half for Illinois ; Iowa actually showing a small increase for that period. *For the three Granger states, Wisconsin, Illinois, and Iowa, the decrease did not exceed one-half of 1 per cent.*

‘ When we come to the adjoining states, however, the figures give us very different results. Here the decrease for exactly the same period of time amounted to \$4,375,796, or to 7.5 per cent. What was the cause of this decrease ? It certainly cannot be charged to Granger legislation in these states. The Granger laws complained of by the railroads were confined wholly to the states which we have

designated Granger states. This shrinkage in gross earnings, then, for these states, which were separated from the Granger states by only a boundary line, was clearly due to other forces. This is further demonstrated when we investigate the figures for the other groups. The Middle states show a decrease in gross earnings of \$18,374,884, or 9.5 per cent. The Southern states show a decrease of \$3,297,182, or 6.1 per cent. The whole country shows a decrease of the gross earnings of the railroads for the Granger period amounting to \$23,354,430, or 4.4 per cent, as against a decrease of *three-fifths of 1 per cent* for the Granger states during the two Granger years.'

But not only is it thus demonstrable that the Granger legislation did no appreciable harm, it also is equally demonstrable that at least in an indirect way it accomplished a very considerable amount of good.

While the Minnesota law was repealed, one year after its passage, and the Wisconsin law two years after its passage, on the other hand the Illinois law of 1871 served as a stepping-stone to the more effective measure of 1873, and the Iowa law of 1874 served to prepare the way for the more successful enactment of 1878. This in turn had as its natural outgrowth the statute of 1888, which established in Iowa a mandatory railway commission with power to prescribe rates. And while the results of these last and most effective attempts at railway regulation on the part of Iowa and Illinois have proved far from ideally satisfactory, they nevertheless have constituted the half-loaf which to everybody but the fanatical theorist is so palpably better than no loaf at all.

In his regular message to the Legislature in 1903,

Governor La Follette made a complete demonstration of the practical value of State railway regulation in Iowa and Illinois by showing how much higher railway rates were in Wisconsin, where there existed no effective State control, than in Iowa and Illinois, where rates were subject to regulation by railway commissions. He compared the rates on general merchandise between Milwaukee and 132 stations in Wisconsin, with the rates for like distances within the State of Iowa, and showed that on an average Wisconsin rates were from 28 to 50 per cent higher than those in Iowa.

He also compared the rates on live stock, grain, and coal between Milwaukee and various stations in Wisconsin with the rates for like services between Chicago and various stations in Illinois with the following results :

For 142 stations in each State the average rates on cattle were 37 per cent higher in Wisconsin than for like shipments and distances in Illinois.

For 142 stations in each State the average rates on hogs were 31 per cent higher in Wisconsin than in Illinois.

For 142 stations in each State the rates on sheep were 20 per cent higher in Wisconsin than in Illinois.

For 130 stations in each State the average rates on hard and soft coal were 24 and 31 per cent, respectively, higher in Wisconsin than in Illinois.

For 130 stations in each State the average rates on grain were 28 per cent higher in Wisconsin than in Illinois.

In his special message of April 28, 1903, other detailed comparisons of this nature were made between

rates from practically all stations on the Chicago, Milwaukee and St. Paul Railroad and the Chicago and North-Western Railroad to Milwaukee, and rates on like goods for like distances in Iowa. It was made clear that the Wisconsin rates were about 36 per cent higher on grain, about 45 per cent higher on hogs, about 22 per cent higher on furniture, about 38 per cent higher on hay, and from 12 to 20 per cent higher on the various raw materials which enter into manufactured products.

The railways issued some pamphlets in reply to these arguments in favour of the establishment of a Wisconsin State Railroad Commission, but much of their reasoning was so manifestly specious and made with a view to confusing the public mind, that even such of their arguments as were sound, carried little conviction. The people very naturally applied to the situation the rule of evidence which rejects the entire testimony of persons found to be misrepresenting their case.

The highly encouraging, practical results obtained from State regulation in Iowa, Texas, and to a less extent in Illinois and a number of other states, have been of such a nature as to stimulate without satisfying the public demand for effective regulation. These immensely valuable, but after all only partial, successes have failed so signally to satisfy the public sense of justice and right, and have proved so inadequate to the industrial and business needs of the travelling and shipping public, that most of our states have struggled doggedly on year after year, making experiment after experiment, with all sorts of new

maximum rate laws and new railway commissions, in the hope of finally arriving at some real and adequate solution of this vexed question. For example, from 1902 to 1908, over eight hundred¹ distinct provisions were enacted to regulate common carriers engaged in purely State traffic; during this half-decade eight new commissions were created, and seven of the thirty-one already in existence in 1902 were reorganized—the tendency manifested in all this recent legislation being toward a large increase in the powers of the commissions.

The real status of railway regulation in this country, however, has been determined not so much by legislative enactment as by judicial decisions. But though our court of final jurisdiction in theory is always right, it is not always consistent. As the personnel of that august body has changed, transformations likewise have taken place in the principles laid down by it for the guidance of lower courts, legislators, and railway commissioners. From the decision in the case of *Munn v. Illinois*² in 1876 to that in the case of *Cutting v. Goddard* in 1901 is indeed a far cry. Says Mr. A. D. Adams :³

‘A quarter of a century has transferred the test of reasonable rates from the opinions of state legislatures to the opinion of the Supreme Court. In the Granger Cases the court denied its right to interfere with local rates fixed by legislatures, even when these rates were so low as to destroy all profits. This doctrine, after various adverse dicta, was fully repudiated by the case of *Chicago, &c. Railway Co. v. Minnesota*, decided in 1889, thirteen years

¹ G. G. Huebner, *Annals of American Academy of Political and Social Science*, July 1908, p. 138.

² 94 U.S. 143.

³ *Railway Problems*, by W. Z. Ripley, pp. 577-8.

after the Granger Cases. From that date to 1896, when *Covington, &c., v. Sandford* was decided, the court went no farther than to hold that legislative rates must afford some income above operating expenses. Another step was taken the following year, when the court held in *Smyth v. Ames* that rates which permitted a net profit of as much as 10·63 per cent on one road, but nothing on others, could not be enforced as to either.

‘Finally, in 1901 comes the decision, in *Cutting v. Goddard*, that rates which yield a profit of 10·9 per cent on the investment are not unreasonable, and that rates which would reduce this profit to 5·3 per cent are unconstitutional.’

From 1901 to 1909 a large number of other important decisions have been handed down dealing with this same vexed question of legislative authority over railway transportation. But, unfortunately, new subjects of controversy seem constantly to be arising, so that to-day it would be almost as difficult as it ever has been to state just what regulative powers can be exercised by State legislatures and commissions over common carriers. Whether really effective State control of interstate traffic is possible under our present form of government and in our present stage of development, is still an open question, with the key to the situation decidedly in the hands of our American sovereign power—the *Judiciary*.

If the courts finally decide to recognize as constitutional the new powers which recently have been conferred on State railway commissions, our present very promising experiment with railway regulation can be thoroughly tested and a demonstration made as to its success or failure. However, even if sustained

by the courts, the recent increase in the powers and prerogatives of railway commissions will prove of little value except when accompanied, as it has been in Wisconsin and New York, by a corresponding increase in the scientific and technical qualification of railway commissioners.

It would be hard to over-estimate the importance of securing none but thoroughly competent experts for the highly specialized category of work which railway commissioners are supposed to do. Without the services of such trained specialists the main function of a commission unconsciously is done away with. The necessity for the commission form of railway control arose largely from the fact that when railway cases were tried before ordinary judges, the railways having in their employ practically all of the experts heard in the case, as a rule were able to overawe or confuse the judges, most of whom had no special competence in such matters, as well as to discredit the testimony of the shippers, who necessarily were unprepared successfully to rebut the skilfully prepared interested testimony of the witnesses of the railways. These well-paid experts, having all the facts and figures at their command, made a practice of omitting all mention of facts which could have been prejudicial to their side of the case, and sometimes did not even hesitate to distort or manufacture statistics in favour of their employers.

In like manner the comparative failure in the past of most attempts at State railway regulation by legislatures and commissions has been due almost as largely to the lack of competence on the part of

legislators and commissioners as to their lack of the moral fibre required to enable them to resist the intimidation and corrupt manipulations of railway attorneys and lobbyists. The recent advent of the able, trustworthy, and highly-trained railway specialist, employed by the State and paid to devote his whole time and ability to the great work of safeguarding the just interests of shippers, employees, the travelling public, and the carriers alike, without question is the most important innovation which the modern commission has introduced into the sphere of railway regulation.

WISCONSIN AND NEW YORK COMMISSIONS

The two most powerful and promising Commissions so far created are those of Wisconsin and New York. Both are appointive bodies and are composed of highly competent experts. Both are endeavouring in an entirely conservative and scientific way to secure a full measure of justice to the public without trespassing in the slightest degree upon any *legitimate* interests of the carriers. And while neither of these Commissions has been in existence long enough to give a full demonstration of its possibilities for good, yet the results already obtained have been so encouraging, that it seems only fair to suppose that much more will be accomplished by them in the near future.

In a number of important particulars the Wisconsin Commission seems to be better fitted for the work it has to do than is its larger and better paid New York rival. In Wisconsin *any* person or corporation may make complaint to the Commission or the Commission

may undertake investigations on its own initiative ; whereas in New York only aggrieved persons can make such complaint. The New York Legislature evidently overlooked the fact that aggrieved persons very frequently dare not make a complaint to a commission, for fear that the railways will retaliate, as they have done only too frequently in England¹ as well as in the United States. Moreover, whereas in New York the Commission is empowered to make maximum rates, in Wisconsin it is permitted to make the exact rate and to require the roads to refund any excessive freight charges that have been collected from shippers.

Two especially noteworthy provisions of the Wisconsin railway law ought to be incorporated into the New York law as well as into similar statutes in every state in the Union. Section thirty-three provides that no part of this Act nor any rule, regulation, or order of the Commission shall be declared inoperative, illegal, or void because of any omission of a technical nature in respect thereto. The other provision referred to is the one governing the manner in which cases taken to the courts on appeal are referred back to the Commission automatically, as soon as any new evidence is introduced. In this way the whole case must be tried before the Commission and nothing can go before the court which has not been before the Commission. This salutary arrangement prevents the railways from holding back a part of their testimony until the case has been appealed from the Commission to the courts, thus enabling the Commission to have cognizance of all

¹ See *Railroad Transportation*, Arthur T. Hadley, p. 175.

the facts in the case before any decision in the matter is rendered.

As in these and a number of other important particulars, the Wisconsin Commission is a more effectively constituted body than the New York Commission, it seems unfortunate that Georgia should have modelled her present Commission after the New York one, and that Illinois and other states should be considering the advisability of taking similar action. The superiority of the Wisconsin law is so generally recognized among experts, that until a still better statute has been enacted by some other state, it would seem only reasonable that it should serve as a model for all future State legislation of a like character.

Unquestionably the Wisconsin law can and will be strengthened from time to time by amendment. The Commission recently recommended¹ to the Legislature several minor improvements which were enacted into law during the last session of the Legislature. But the broad general principles on which the law is based have proved sound and in no need of revision.

One of the best things the Commission has done has been to explode once and for ever the hoary old superstition to the effect that the rates established by railways when left entirely free from government interference, have been established on scientific economic foundations and worked out in a thoroughly rational and clear-headed way, in accordance with the dictates of an enlightened self-interest. The Commission not only has decided, but actually has succeeded

¹ *Report for 1908*, pp. 78-82 inclusive.

in demonstrating, that unregulated railway rates, as a general rule, are about as unscientific and illogical as it is possible to make them—not only being grossly unfair at times to shippers, but also frequently being opposed to the best interests of railway stockholders. As a rule, such rates are the product of long periods of negotiations and struggles between shippers and carriers. The mistakes once made by some tired or inefficient traffic manager or other railway official, are rarely ever corrected by his successors, unless their attention happens to be called to them by especially unsatisfactory financial results accruing therefrom, by interested shippers or by state or national commissions. To the Wisconsin Commission unquestionably belongs the signal distinction of having made the most important contribution to the theory and practice of scientific rate-making that has been made in recent years. As a result of a long and careful investigation, it actually has demonstrated in a concrete and detailed way that it is just as easy for a railway to arrive at an accurate and practical *approximation* of the cost of any given service, as it is for a great corporation, like the Steel Trust, to determine the *approximate* cost of any given product, such as a screw, a rail, or a hammer.¹ The Commission recognizes that in arriving at the proper rate to be charged for a given service, the cost of that service is only one of the two principal factors to be considered; the other important factor being the rate which the traffic will bear, but it insists that the system

¹ See its famous decision in case of *Buell v. Chicago, Milwaukee and St. Paul Railroad*. *Report of Wisconsin Railroad Commission*, vol. i.

of charging 'what the traffic will bear', irrespective of 'the cost of service', is quite as unreasonable and undesirable as would be the reverse process of charging precisely what the service has cost, irrespective of what the traffic would bear.

In the way of practical results much already has been accomplished by the Wisconsin Commission. Reductions in freight rates have been brought about on grain, live stock, pulp wood, potatoes, coal, cheese, &c., and the Commission believes it has practically abolished all forms of discrimination. Moreover, for the convenience of the travelling and shipping public a number of improvements in the quality and quantity of service have been brought about by the Commission. New trains have been put on certain divisions, several new stations have been built, improved station facilities have been installed in old stations, and more convenient train schedules and connections have been arranged.

The Wisconsin Commission has been severely criticized in certain quarters for its stand in favour of a $2\frac{1}{2}$ cent instead of a 2 cent fare. The Legislature which passed the 2 cent fare law over the Commission's head, doubtless was acting more in accordance with the prevailing popular sentiment, and possibly was acting more in accordance with pure and abstract principles of justice and right than was the Commission. But the duties devolving upon the Commission are not in any sense abstract. Rather are they the most concrete and practical sort of duties imaginable. Moreover, the Commission is supposed to go about the performance

of these duties in a thoroughgoing and strictly scientific way. While working out a solution for any one aspect of the railway problem it necessarily must take into consideration all the other important aspects of that problem. Probably it is true, as contended by the partisans of the 2 cent fare, that such a fare, even when accompanied by a similarly reduced freight schedule, could be made to pay a reasonable dividend upon all the capital actually invested in the roads. But until the even more important question of freight rates had been properly gone into, and the problem of fictitious capitalization had been satisfactorily worked out, the Commission undoubtedly was justified in proceeding with great care and circumspection in the exercise of its power to bring about important passenger rate reductions.

It is a matter for congratulation that so far, the eminently fair and discriminating efforts of the Wisconsin Commission to enforce the law have not met with the sullen and stealthy opposition which railway officials have shown to practically all other attempted railway regulation—state or national—in this or in other countries. This fact doubtless is due largely to the highly scientific and practical way in which the Commission has carried on its work. Every case that has come before it has been handled as though it were a problem in original research. As a consequence the Commission generally has been able to demonstrate the correctness of its position so completely, that even railway managers have been forced to admire its ability and fairness. The pioneer work thus accom-

plished already is proving to be of great value to judges and railway commissioners in other states, as they are called upon to deal with transportation problems similar to those which have been solved so successfully in Wisconsin. In a number of important cases its decisions have established certain principles so clearly and strongly that it seems probable they will be cited as authoritative precedents by courts and commissions throughout the country for years to come.

Up to the present time only three of its decisions have been taken into court, and of these only one has been passed upon by the Supreme Court of the State. The decision handed down by the Supreme Court in June 1908 is an epoch-making pronunciamiento. Says the Chairman of the Commission :¹

‘ This decision discusses the order of the Commission under review ; it analyses and interprets the salient provisions of the statute creating the Commission ; it meets in the broadest and most progressive manner the arguments relating to constitutional limitations and the allegations regarding the exercise of legislative power by the Commission ; it brings into clear perspective the rights of the companies as well as the rights of the public ; and in substance it declares that even though on the given facts the courts might decide a case differently from what the Commission does, if no errors of law have been committed, and the question is one regarding which reasonable and competent men might differ, the courts will not set aside the order of the Commission. In other words, the court may feel that the Commission should have rendered an

¹ *The Wisconsin Public Utilities Law*. An address before the National Municipal League, Pittsburg, November 19, 1908. By B. H. Meyer.

opposite decision, yet, within the limits of the law and the discretion of the Commission, it will sustain that decision.

‘ So far as I know, this decision stands practically alone in this country in the breadth of the views expressed with respect to the regulation of public utilities and the extent of the support it gives to the administrative authority charged with that regulation. There were two concurring and one dissenting opinion.’

It is to be hoped that the attitude so far taken by the Wisconsin courts and the Wisconsin railways in regard to the work of this latest and most approved pattern of Railroad Commission will be consistently maintained, for the strategic importance of making a success of this the most promising experiment yet attempted with State railway regulation can scarcely be over-estimated.

But however encouraging the immediate results of this experiment may be, any serious consideration of the problem of State railway regulation necessarily would be incomplete which failed to take into account the grave dangers involved in the delegation of vast and ever vaster powers to largely autonomous bodies of experts. The Democratic party has rendered the country a real service in calling public attention to the dangers involved in ‘ government by Commission ’, and it is to be hoped that it will not stop with this purely critical work. It would seem that the true remedy for the evils complained of, both present and prospective, will be found, not in a discontinuance of the use of experts, but rather in the incorporation into the Commission plan of Government of the power of ‘ popular recall ’, which for some time has been operating so

satisfactorily in connection with the municipal governments of Des Moines and Cedar Rapids Iowa, Los Angeles California, and elsewhere. As the problems of government become more and more complicated and delicate, the utilization of highly-trained specialists will become constantly more necessary. *But this species of government by experts can be developed with safety only on condition that all specialists shall be employed strictly and always as the servants, and not as the masters, of the sovereign people.*

The conclusion which seems to force itself upon us from the foregoing discussion is to the effect that there is still an important sphere in this country for purely State railway regulation. Within that sphere it is daily becoming more and more apparent that certain State commissions—notably those of Wisconsin and New York—have achieved fully as satisfactory results as the Interstate Commerce Commission has in its enormously wider field. And while it seems not only possible but probable that the Federal Commission soon will have to establish a local subcommission in each of the ten territorial subdivisions into which, for statistical and other purposes, the Commission has divided the railways of the country, at the same time that fact in itself would not seem to be a sufficient reason for transferring to the Federal Commission all the powers of control over local traffic now exercised by State commissions. If, however, these subcommissions ultimately should demonstrate a greater ability to handle the questions which come before them than the State commissioners do to deal with their purely State problems, on the

principle of the survival of the fittest, doubtless some way eventually will be found to transfer the functions of the State commissions to these local Federal Boards. While such a change probably would meet with no very considerable opposition on the part of the intelligent public, yet there is another possible turn of affairs, which by all good citizens must necessarily be regarded as a national calamity. During the past few years, as our State railway commissions have been developing greater usefulness and power, there has been germinating in the minds of railway managers and apologists a desire to sidetrack this new and formidable regulative influence, by shunting on to the shoulders of the Federal Commission certain powers of the State Commissions which it was not created to exercise, and is not prepared to exercise effectively. Every proposition of this nature should be opposed with all possible vigour, not only by our old-fashioned 'states rights' advocates, and not only by all believers in a reasonable degree of 'local self-government', but as well by all true Americans, whatever political theories they hold, who are in favour of the establishment in this country of a really effective system of railway regulation.

CHAPTER II

PRESENT STATUS OF FEDERAL REGULATION¹

THERE is no disputing the fact that during the year 1908 some of our railways were 'hard hit'. There was a shrinkage in the values of their securities that could only be computed in billions of dollars; in April there were between nine and ten thousand miles of railway in the hands of receivers,² with a number of other lines threatened with a similar fate in the near future; during the year hundreds of thousands of railway employees were discharged; and during a period of several months thousands of empty freight cars were standing idle on every important line in the country, while practically no new rolling stock of any sort was being ordered by any of the roads.

While doubtless there is a certain amount of truth in the statement that railway conditions during that year were more or less due to the 'pernicious activity' of President Roosevelt in behalf of the 'rate bill', as well as of other proposed railway legislation, there would be considerably *more* truth in a statement to the effect that our past and present peculiar pathological railway conditions are the result of the 'masterly

¹ The present volume went to press too early to enable the writer to discuss the probable effects on Federal regulation of the Interstate Commerce Act of June 18, 1910.

² *Twenty-first Annual Report of Interstate Commerce Commission*, p. 153, and *Railway World*, March 13, 1908, p. 203.

inactivity ' of Mr. Roosevelt's immediate predecessors, and of the studied refusal on the part of Congress after Congress to abolish rebating, stock-watering, and other transportation abuses about the existence of which there was and could be no possible dispute.

If instead of probing and lancing this running sore on our body politic, Mr. Roosevelt had anointed it with a salve of soft words and soft soap—the recent crisis might possibly have been shunted on to the shoulders of the present administration. But it is pretty generally admitted that he deserves the thanks of all honest men for having located the disease and partially checked its ravages, even though he failed signally to suggest any remedy for the more fundamental aspects of the disorder. In a word, the fundamental cause of our present transportation difficulties is not the precipitancy of Mr. Roosevelt, but the unintelligent and inexcusable delay of the American people about inaugurating an adequate and effective system of railway regulation. The fact which perhaps stands out most clearly and prominently in the midst of all our present turmoil, is the fact that the present policy of railway regulation must be continued and perfected, if all of us, farmers, manufacturers, business men and wage earners, are not to be reduced to a status of mere economic dependents upon the men and corporations who control our great lines of transportation.

HELPLESS v. HARMFUL RAILWAY REGULATION

Thus far nearly all intelligent and disinterested people are in practical agreement—but this is not the

whole story. There is such a thing as intelligent and wholly beneficial railway regulation, and there is such a thing as unintelligent and pernicious railway regulation. The sweeping prohibitions of the 'Sherman' Anti-Trust Act, and the Anti-Pooling clause of the original Interstate Commerce law, are examples of this ill-advised species of Federal railway regulation, while certain state statutes passed during the years 1906 and 1907 furnish equally striking examples of crude and ineffectual attempts at state regulation. Never in the history of the country, not even during the Granger movement, has such a widespread and strenuous effort been made to regulate railway transportation as during the year following the passage of the famous 'Rate Bill' of August 28, 1906. Passenger rates were reduced or affected in some way in twenty-one states, and in eleven states railway commissions were created. Thirty-five states attempted to enact laws reducing freight or passenger rates, establishing railway commissions, increasing the powers of existing commissions, regulating car service, demurrage, safety appliances, block signals, free passes, capitalization, liability for accidents to employees, hours of labour, blacklisting, &c.¹

Truly such a miscellaneous hodgepodge, patchwork collection of laws never has been produced in the same space of time before. In most of the states each lawmaker evidently worked out his problem to the best of his ability, with little regard for what had been done or was being done by the nation or by other states, or

¹ 'The Legislatures and the Railroads,' by Emmett Ireton. *Review of Reviews*, August 1907.

even by other legislators in his own state. Texas alone is said to have had nearly one hundred bills introduced dealing with this one question. Such a lack among the 'reform elements' of any mutual comprehension, or of any appreciation of the necessity for co-ordination in their efforts, would be ludicrous if it were not so serious. That it has resulted in a curiously complicated crazy quilt of railway legislation which will take the courts a long time to unravel or to rearrange is not at all surprising.

That a considerable amount of this legislation will prove beneficial is unquestionable, but that it would have proved infinitely more effective and less liable to judicial nullification had it been rationally co-ordinated and made a part of some intelligent and comprehensive plan of procedure is even more certain.

It is true that the railways, by fighting persistently, bitterly, and often corruptly, for over half a century, practically every proposal of reform, no matter how reasonable or just it might be, have made themselves largely responsible for the present confused and embarrassing state of affairs. And while it seems only right that they should suffer for their stupidity and cupidity in the past, it is not so clear that the rest of us should be made to suffer with them. This, however, is precisely what we are doing and must continue to do to an increasing degree, if we do not take pains to frame our regulative legislation with the utmost possible skill and care. So dependent is the prosperity of the country on the efficiency of its transportation facilities, that any action which ties up the railways *beyond a certain point*,

is certain to react and injure every business man, farmer and wage earner in the land.

Another factor in the present situation which looms very large in the minds of railway managers and railway security holders, is the *contemplated* future railway legislation of Congress and of the various State legislatures. The decisions of the Supreme Court on March 23, 1908, in the 'Minnesota case'¹ and the 'North Carolina case',² doubtless will have a soothing effect on those who are most fearful of State legislation, but while such decisions may put a temporary quietus on certain varieties of legislative activity, at the same time, as they do not help us to solve any of the problems with which our people are trying to grapple, manifestly their net result will be merely to change the channel through which public opinion eventually will work its way to a satisfactory solution.

BASIC PRINCIPLES

There are several fundamental principles upon which must be based any superstructure of systematized railway legislation which may be reared, if such legislation is to do more good than harm. In the natural order of things, it must be recognized first of all, that as the whole is more important than any of its parts, so the public welfare is and always must be the primary consideration in dealing with this or any other *public* question. Fortunately this principle at last has been thoroughly established by legislation already placed upon our statute books. Railways to-day are everywhere recognized as quasi-public corporations, amenable

¹ *U.S. Reports*, vol. ccix, p. 123.

² *Ibid.* p. 205.

to any and all reasonable and just public regulation in the public interest.

Secondly we must recognize, that in the long run, the body politic cannot profit by any form of injustice toward any class or legitimate interest, and that consequently any inelastic or unnecessarily bothersome form of regulation, which would have a tendency to cripple the railways in the honest and efficient performance of their functions, is a dangerous form of regulation gone to seed. In its efforts to prevent the roads from wrong doing, the Government should have a care not to take any action which would hamper them in the transaction of their ordinary legitimate business, or that would prevent them from initiating new policies which would be to the mutual advantage of themselves and of the general public.

Speaking of this sort of regulation in England, Mr. Acworth gives as an example the experience of the 'Great Eastern Railway'. He says :

'The Great Eastern management, however, was perfectly frank. It made its reductions in its own interest. "Our district," said its representatives, "is hard hit by the agricultural depression. We will reduce our rates, and do what we can to lighten the burdens of our customers, the farmers. When agriculture recovers, they will not object if we put the rates up again, and claim a share of their gains as we shall have shared their losses." But what has in fact happened ? The Board of Trade ruler has drawn its line across the tops of the existing charges, cutting off not a few of them at a point which implies to a struggling company a loss which it can ill afford, and making any serious increase in charge impossible in the future. With this object-lesson before its eyes, is any railway company

likely hereafter to be so short-sighted as to go in for a policy of reduction in view of its own immediate interests ? Will not rates be kept up all over the country with far more uniformity than has ever existed in the past ? ' ¹

And again, he says :—

' One word more. The fiercest advocate of the traders' claims will scarcely deny that rates have steadily, even if slowly, moved downwards ; that over a series of years, that is, the public get more and more accommodation all round for the same money. With the régime inaugurated by the Provisional Orders (establishment of new maximum rates by the Board of Trade), this era may be taken to have definitely closed. The companies have been solemnly warned, "Never reduce rates. Each reduction that you make will be taken as a precedent against you in the future." ' ²

The third principle involved in this discussion has to do with the constructive side of the question. In dealing with a matter as delicate, as complicated, and as vital to the public welfare as is the railway system of a country, legislators and voters should be made to see that, if there is anything our government authorities can do to encourage or aid those roads which seriously are endeavouring to obey the laws and to give us a 'square deal' in the matter of transportation, it should be done promptly and gladly. While recent experience demonstrates very clearly that railways may be very prosperous and at the same time inefficient, the further fact must not be lost sight of, that roads which are not prosperous will not and cannot be efficient.

¹ *The Railways and the Traders*, W. M. Acworth, pp. 365–6.

² *Ibid.* W. M. Acworth, p. 364.

PRESENT STATUS OF FEDERAL COMMISSION

The Interstate Commerce Commission, as at present constituted, is achieving a success which has surprised its friends and disconcerted its foes. Without working any injury to legitimate railway interests, it yet has actually succeeded in protecting a large number of shippers, travellers, and railway employees from railway oppression. It is worth while to glance for a moment at some of its more important activities.

The function of conducting 'formal hearings' in cases brought before it by individuals who consider that they are being discriminated against, or that they are being required to pay unreasonable rates, has acquired a new dignity and significance since the Commission has been empowered to fix maximum rates as well as to determine what damages shall be paid the injured shipper. 'Findings' or decisions of the Commission in a single case of this sort sometimes establish a principle or a precedent which results in changing the rates on a given commodity for an entire section of the country or for an entire industry.

One of the most important powers exercised by the Commission in the past has been that of investigating the evils and abuses incident to our system of practically unregulated corporation railways. By means of the published reports of such investigations as that of the wholesale graft in connection with the discriminations of the Coal Carrying Roads, of the financial crookedness in connection with the Alton Deal, &c., it has placed in the hands of Congress, and within the reach of all

students of the subject, a mass of thoroughly authenticated facts, which is proving to be of the greatest possible value, in the working out of remedies for such abuses.

But the recent decision of the Supreme Court in the 'Harriman case'¹ has deprived the Commission of its power to initiate and carry on investigations of railway abuses over which it has not yet been given jurisdiction. Thus, at a stroke, the provisions in the twelfth and following sections of the law, requiring the Commission to keep itself and Congress informed as to railway methods of doing business, with a view to enabling Congress to legislate intelligently on these matters, have been rendered null and void. It is to be hoped that at its next session Congress will not fail to clothe the Commission with this most important power.

Another branch of the work of the Commission dealing with what is called 'informal complaints' has recently been made a special division and transferred to the Bureau of Statistics and Accounts. Any shipper or passenger who feels that he has been unfairly treated by an interstate railway can, without any cost to himself, lodge an informal complaint with the Commission. If upon investigation it is found that the complaint is justified, the matter at once is brought to the attention of the railway in question and reparation demanded. During the year 1908, some 4,640 complaints of this nature were filed with the Commission as against 503 in the year 1905, 1,002 in the year 1906, and 2,226 in 1907, showing an increase for 1908 of more than 100

¹ Handed down December 14, 1908.

per cent over the preceding year. From August 28, 1906, or the date when the new law became effective, to September 15, 1908, 6,710 informal complaints were taken up by the Commission against the offending railways, while almost as many were ruled out as not being well founded, or as not coming within the jurisdiction of the Commission. In connection with this work, there were received, briefed, filed and answered, 66,933 letters in 1907 and 104,034 in 1908.

When the general public becomes aware of the fact that, without charging anything for its services, the Commission stands ready at all times to take up the cudgels on behalf of the most insignificant farmer, merchant, or shipper of any sort, even though the excess freight charged does not amount to more than one dollar, it is probable that the work of this special division will increase so rapidly that the railways, finally realizing that this form of petty extortion can no longer be indulged in with impunity, will themselves decide to put a stop to it.

A new Department of the Commission, known as the 'Department of Prosecutions', was organized in 1907. Its duty is to investigate charges of criminal infractions of the law on the part of the railroads, and upon the discovery of actual violations of the law to prepare cases for presentation to the United States Attorneys in the districts having jurisdiction over them. It is a notable fact, that such sound judgement has been manifested by this division, that most of the cases which have been tried at its instigation have resulted in convictions.

Another of the highly important activities of the Commission in years past has been the work of its 'Bureau of Statistics and Accounts,' which has given us a system of railway statistics that has long been the wonder and admiration of railway authorities all over the world. An important part of the work of this Department has been the publication, in connection with the accident division, of statistics showing the useless, wholesale butchery of human beings by the thousands and tens of thousands on the part of the railways. These statistics have been eagerly seized upon, popularized and republished in papers and magazines¹ in all parts of the country. As a result of this species of educational campaign, which has been carried on during the greater part of the lifetime of the Commission, several laws have been passed by Congress for the protection of the lives of railway employees and of the travelling public. The present widespread use of the automatic coupler, of grab-irons, and of the air-brake, is the result of the Safety Appliance law passed in 1893, and amended in 1896 and 1903.² Two important laws of this nature recently forced through Congress, in spite of vigorous railway opposition, are the 'Hours of Labour law', of which Senator La Follette, of Wisconsin, was the champion, and a law appropriating \$50,000 with which to defray the expenses of a scientific investigation by experts of safety devices for the prevention of railway accidents.

¹ See chapters IX and X.

² See diagram on page 189 concerning accidents to railway employees.

The Division of Safety Appliances is in charge of Secretary Edward A. Moseley. This Division has a corps of inspectors at work constantly travelling about the country inspecting the railways with an eye to the rigid enforcement of the Safety Appliances laws and Hours of Labour law. Violation of these laws is at once vigorously prosecuted by the special attorneys employed by the secretary for that purpose. This division also issues quarterly accident bulletins, so that Congress, the Commission, and the public, in addition to the yearly publications of the Bureau of Statistics, may have more frequent and more up-to-date information on this vitally important question.

One of the greatest triumphs for genuine reform which was incorporated into the recent Rate law, was the provision empowering the Interstate Commerce Commission not only to prescribe the methods of accounting for all interstate railways in the country, but also to carry on a thoroughgoing and systematic supervision of the way in which its instructions in this matter are being carried out. The fact that the Sixtieth Congress appropriated \$350,000 to cover the expenses of this work serves as an indication of the size and importance of this undertaking. While during the discussion of the recent Rate Bill, and since its passage, the eyes of the public have been focused chiefly on the question of rate regulation, yet the truth of the matter is that the clause giving to the Commission power to compel the roads *to conduct their affairs in the open and in accordance with the recognized methods of legitimate business*, is the most important provision

contained in the law. Practically all disinterested and intelligent people are in favour of the publicity thus provided for, both because of the immediate good it will accomplish, and because of the even greater prospective benefits which will be derived from the utilization of the results of this publicity, as a basis for more intelligent future railway legislation.

CHAPTER III

PROPOSED REFORMS IN FEDERAL REGULATION

OF the multifarious suggestions which have been made for increasing the power of the Interstate Commerce Commission, a few stand out in bold relief as being eminently sane and conservative—as having the double merit of safeguarding the legitimate interests of both the railways and the public.

Among the most interesting recent proposals of this nature is the one which Mr. Roosevelt advocated so often and so vigorously in his messages, to the effect that the Sherman Anti-Trust Act should be amended so as to permit the formation of Railway Traffic Associations, properly regulated by the Interstate Commerce Commission, and with all their operations laid open to public inspection. Although the sixtieth Congress could not be made to realize the importance of such an amendment, there can be little dispute about its desirability.

The Sherman law as it now stands, like all sweeping prohibitory laws, is ineffective. It serves largely as a pitfall and stumbling-block to honest railway managers and as a pretext for favouritism, dishonesty, and lawlessness on the part of the predatory devotees of high finance. If rigorously enforced it would seriously

cripple, in some cases, both railways and shippers in the daily transaction of entirely legitimate business, and when not enforced it is apt to breed a dangerous contempt for law, as well as to open the door to a number of species of sharp practice and malpractice.

In this connection it is worthy of note that English public opinion is being wrought up just now over a proposition embodying the same general principle. For a long time the railway situation in England has been far from satisfactory. The English shipper has had to pay practically 'the highest rates in Europe', while at the same time railway stockholders have been receiving a low and steadily declining dividend. When however the nationalization of the railways has been proposed, it has been objected to even by a number of those who believe in Government ownership for other countries, because, as was explained to the author last year by the Hon. John Burns: 'The British railways are sinking more and more capital every year upon which, in spite of their high freight and passenger rates, they are receiving lower and lower returns. They were constructed on the wrong principle, the competitive principle—causing an utterly useless duplication of tracks, and an equally useless duplication of trains running from London at the same hour and to the same destination on competing lines. In this way millions of pounds of capital have been and are being squandered that ultimately will prove to be practically a total loss. Manifestly the Government would be most unwise to take over an enterprise which is in such an utterly unsatisfactory financial condition.'

The most practical constructive suggestion that has been made in connection with this matter is one which at present seems to be receiving very general favour all over England,—that of replacing the present discredited régime of railway competition by one of combination and restricted monopoly. It is held that while it is too late to prevent the losses arising from the needless duplication of tracks,¹ it is not too late to do away with all useless competing trains, and all other unnecessary expenses caused by the attempt to secure *competition* in railway service. In exchange for this concession from the Government it is proposed that the roads shall be subjected to more vigorous regulation than at present, and that *the public, through a general reduction in railway rates, shall be given the benefit of a good share of the economies thus made possible.*

RAILWAY VALUATION

Another entirely equitable and conservative proposal which has been widely discussed, and which has been advocated alike by Mr. Roosevelt and Mr. Bryan, by Senator La Follette and Senator Newlands and other leading railway authorities, as well as by the Interstate Commerce Commission, is to the effect that the Commission shall be empowered to make an accurate and fair physical valuation of the railways of the country. In its Twenty-first Annual Report for the year 1907,

¹ The Mexican Consolidated National Railways have decided to save future expense by 'scrapping' all the useless duplicate tracks, stations, &c., which were foolishly constructed during the former competitive régime.

the Commission, after going into the matter in considerable detail, says : ¹

‘ From whatever point of view this question of valuation be regarded, whether of reasonable capitalization, of a reasonable schedule of rates, of effective administration of the depreciation accounts, or of the correct interpretation of the balance-sheet, one is forced to conclude that an authoritative valuation of railway property *is the next important step in the development of governmental supervision over railway administration.*’

The State of Texas was the pioneer in the matter of railway valuation. In 1893 a law was passed providing for a careful valuation of all the railways within the State, for the purpose of putting a stop to stock-watering. The next two states to take this important step were Michigan, in 1900, and Wisconsin, in 1903—their valuations being made for the purpose of determining the proper basis of taxation for railway properties.

The first state to make a valuation primarily for rate-making purposes was Minnesota. Its recently published report has placed a much higher valuation on the Minnesota roads than the State engineers have placed on the railways in any other state. While this can be accounted for partially by the enormous general rise in prices during the past few years, yet the additional fact must not be lost sight of, that the railways which were valued for taxation purposes naturally were averse to having their valuations made too high, whereas the Minnesota roads, which have just been valued for rate-making purposes, were just as averse to having their valuations made too low.

¹ Page 150.

The results of the pioneer efforts at railways valuation on the part of these states are certain to prove of great practical service to other states as well as to the nation, when the people finally awake to the necessity of dealing with our railway problem in a scientific and businesslike way.

A fair valuation of all our roads by Federal and State authorities could only tend to give strength and stability to the values of the stocks and bonds of all railways which have been capitalized honestly. It would seem that no one would object to this entirely legitimate form of encouragement being offered by the Government to the railways which have resisted the temptation to issue and flood the market with fictitious securities, and as for the others, it is high time that they were receiving vigorous treatment for that all too contagious malady—financial dropsy.

NATIONAL CONTROL OF CAPITALIZATION

Another important and highly commendable step toward the working out of a rational system of railway regulation, is the plan proposed by Mr. Bryan of requiring all railways doing an interstate business to take out a federal licence or franchise; or a similar proposal put forward by Mr. Roosevelt and others, providing for the national incorporation of all roads doing an interstate business. Both of these plans have practically the same object in view, i. e. the subjection of interstate railways to careful national supervision in regard to the issuance of stocks and bonds and all other important matters of railway policy. It is felt

that only in some such way is it possible to prevent future fictitious capitalization, and to insure that all moneys obtained from future issues of securities shall be expended upon actual improvements of the roads, instead of being stealthily diverted into the pockets of the 'light-fingered gentry' of Wall Street. It is difficult to see how any honest objection can be made to the enactment into law of one or the other of these two plans, and it is equally difficult to see how any intelligent and effective system of regulation can be worked out without some such law as a foundation. Fictitious capitalization is the prolific source of abnormally high rates, financial depression, inadequate and unsafe service, popular agitation and turmoil, ineffective legislative action, and endless litigation in both state and national courts of justice.

Railway managers who are striving to do a strictly legitimate business can only regard such a law as a blessing, and what the others think about it ought not to count—except as an argument in its favour.

RATE REGULATION

As to the desirability, and even the necessity of further rate regulation there can be little doubt. The present law was hastily enacted, and while containing some excellent provisions, nevertheless is in sore need of amendment. Among other embarrassments to which the Interstate Commerce Commission is subjected in its efforts to make the law really effective, is the difficulty of making any headway, in face of the sometimes apparently ill-advised interference with its freedom of

action, by judges of the United States District Courts. These Federal judges on occasion seem to have little hesitancy about granting injunctions to corporations without demanding any actual proof that they are really required. A member of the Commission has been quoted as saying,

‘It is beginning to be impressed on me that unless the courts are, by some legislative process, prevented from interfering with the work which the law assumes the Commission to do, we shall be of little use.’¹

Another source of embarrassment complained of by the Interstate Commerce Commission comes from its inability to postpone an advance in rates until the matter has been inquired into carefully, and the equitableness of the advance ruled upon.

‘In several instances,’ says the Commission, ‘courts of equity have interfered to prohibit advances pending proceedings before the Commission. In these cases an injunction has been issued in favour of the *complainants alone*, so that at the present time, the general public is paying the advanced rate, while the complainants are being charged the old rate.’²

Unquestionably this is a gross parody on the administration of justice, and the fact that the Sixtieth Congress, although in full possession of the facts of the case, could not be induced to enact a law to meet this difficulty, is a revolting indication of the sordid power still wielded over that body by the railways. Seemingly it would be a very simple matter, in accordance with the

¹ *Washington Times*, November 4, 1907.

² *Twenty-first Annual Report of Interstate Commerce Commission*, p. 10.

amended 'Fulton Bill', to authorize the Commission to postpone at its discretion any proposed advance in rates until a thorough investigation could be made to determine the reasonableness of such advance.¹ But, for reasons best known to itself, the Senate Committee on Interstate Commerce decided that the public needed no such protection, and on January 6, 1909, reported the bill adversely.

Another difficulty has arisen in connection with the requirement of the law to the effect that a carrier must collect the full published rate, even though in all good faith it has quoted to a shipper a different rate on goods which he has shipped on that understanding. Such a rule injects an entirely pernicious element of uncertainty into business and sometimes works great hardship to shippers.²

'The Commission feels³ that to require the shipper to ascertain for himself at his peril the rate, imposes upon him an undue burden. The railway should know what its established charges are, and may fairly be required to state in writing, when a written request is made by the shipper, the rate which it has published and maintains in force.'

There seems to be no doubt about the urgent need for congressional action to remedy this utterly unnecessary and indefensible difficulty.

Moreover, if gross favouritism is to give way to the 'square deal' in the matter of rates and service, there is dire need also of an amendment to the Commodities

¹ For recommendation of Interstate Commerce Commission see *Twenty-first Annual Report of Interstate Commerce Commission*, p. 10.

² For concrete illustration see *Twenty-second Annual Report of Interstate Commerce Commission*, p. 16.

³ *Ibid.* p. 17.

Clause of the Hepburn Bill, which shall make that clause at once efficacious and constitutional.

‘A considerable number of carriers are owners of and dealers in commodities carried by them. Such carriers succeed, in practically every case, in monopolizing or at least dominating, the markets in which they deal. The commodities clause, by compelling carriers to confine themselves to the transportation business, promised to give many shippers freedom from what has hitherto been crippling discrimination.’¹

The recent decision of the Supreme Court makes clear that there are no insuperable obstacles to such congressional action—except perhaps the lack of any desire on the part of Congress to take such action.

Whether or not any other important rate legislation will be required will depend largely on the nature of the decisions of the Supreme Court which are expected in the near future.

‘Previous to July 1, 1908, only a single suit had been filed to set aside an order of this Commission. It is, however, a significant fact that since that date sixteen suits have been begun for that purpose, and few orders of much consequence have been permitted to go without contest.

‘The questions presented by these various suits are fundamental. The constitutionality of the act itself is in issue. The right of Congress to delegate to any tribunal authority to establish an interstate rate is denied. Perhaps the most serious practical question concerns the extent of the right of the courts to review the orders of the Commission. If the contention of the carriers in this latter respect alone is sustained, but little progress has been made under the Hepburn amendment toward the effective regulation of interstate transportation charges.

¹ *Twenty-second Annual Report of Interstate Commerce Commission*, p. 17.

' In twelve of the seventeen cases preliminary injunctions were prayed for, being granted in six and refused in six.

' It has from the first been well understood that the success of the present act as a regulating measure depended largely upon the facility with which temporary injunctions could be obtained. If a railroad company by mere allegation in its bill of complaint, supported by *ex parte* affidavits, can overturn the result of days of patient investigation, no very satisfactory results can be expected. The railroad loses nothing by these proceedings, since if they fail it can only be required to establish the rate and to pay to shippers the difference between the higher rate collected and the rate which is finally held to be reasonable. In point of fact it usually profits, because it can seldom be required to return more than a fraction of the excess charges collected.

' All these cases are proceeding under the expediting act. Several of them are before the Supreme Court of the United States for argument already, and the rest will be at once taken there. It is believed that the decisions of that court in these cases must go far toward determining the effectiveness of the present act; and indeed the possibility of any effective railway regulation under the present Constitution of the United States.'¹

If the validity of the present law is sustained, and that law is interpreted to mean that rates established by the Commission shall stand *unless the railways can actually demonstrate that such rates are unreasonable* and hence unconstitutional, its power for good will be very great. But if the courts fail to give *full recognition* to this *supremely important power* or function, vigorous and immediate congressional action will be called for, unless the American people intend to give up the

¹ *Twenty-second Annual Report of Interstate Commerce Commission*, p. 20.

struggle to obtain a satisfactory system of Government regulated private railways.

It is hard to say at this time whether or not any other important powers over rates should be conferred upon the Commission. When once we begin to legislate on this subject, it may become difficult to know where to stop. It is quite possible to add more and ever more power over rates to the Interstate Commerce Commission, until finally we shall have transferred to the Commission the entire function of rate making. Railway authorities are very generally agreed that such a plan is undesirable, that in fact, if the Government is to take over the detailed management of the railways, it would be better to go one step farther, as most countries in continental Europe have done, and nationalize the railways outright..

Up to a certain point railway regulation is almost wholly beneficial, but after a certain point any increase in such regulation becomes inelastic, cumbersome, and burdensome alike to shippers and railways. It is easy to find abundant illustration of this tendency in the experience of France, which has, perhaps, the most carefully and elaborately wrought out system of railway regulation in the world. As an example of red tape and routine gone to seed, it will be interesting to cite the process that must be gone through with in France in order to bring about a change in railway rates. The persons desiring such a change first of all have to

‘ send a statement of their case to the railway company, whose responsible officials will investigate the matter. If they approve of it, they must not at once accede to the

application, as would be done here. All they can do is to start it on its travels by sending it to the Minister of Public Works, accompanied by a statement of the company's own views, giving the reasons for their endorsement of the request. Copies are sent to the Commercial Control Department, to be reported on by its officials, and to the Prefect of each and every district through which the lines affected by the proposed changes run, and notice must also be given in the *Journal Officiel*, in case there may be other districts likely to be prejudiced. Then each Prefect is required to communicate the proposition to the Chambers of Commerce in his department, and give them the opportunity of making their own observations thereon. This having been done, the application, together with the comments of the Chambers of Commerce and of other persons, whoever they may be, interested in the matter, is examined, first by the Inspecteur de l'Exploitation Commerciale de la Conscription, then by the Contrôleur-Général, and so on to the officials of any maritime ports, navigable waterways or mining districts affected, until it gets into the hands of the Inspecteur-Général du Réseau.

'By this time the documents in the case will probably have assumed the proportions of a substantial "*dossier*". All the same, the real consideration of the matter is now only about to begin. What has been done already is preliminary to the proceedings of the Comité Consultatif des Chemins de Fer, one of the four advisory committees which aid the Minister of Public Works in keeping watch and guard over the general railway system of the country. It consists of (1) representatives of the Administration, and (2) representatives of the agricultural, commercial, and industrial interests. . . .

'If the proposed alteration in rates should be an important one, the Consultative Committee will appoint a sub-committee to investigate the matter. Otherwise a single member will be delegated to study the various documents and report thereon. The Committee will then consider the

report thus made, and, should it think fit it will make an inquiry on its own account, calling on representatives of the railways, or of the other interests affected, to attend and give such further information as may be desired. Presumably, also, each member of the Committee has the right to express his views on the subject. Finally, a decision is arrived at by the Committee; but this decision can take the form only of a recommendation to the Minister of Public Works; while, after all the circumlocution thus gone through, it is still open to the Minister in question to disregard everything that has been done, and give the ultimate decision, "oui" or "non", according to his own individual opinion. In practice, however, he is generally guided by the advice of the Consultative Committee. . . .

'One month is the least period in which an alteration in an ordinary railway rate in France can be made to pass through the necessary stages, and it may very well happen that the procedure will occupy from six to twelve months. There is a case on record in which a company applied early in the spring for permission to grant a lower passenger rate to a certain seaside resort. The matter was considered, and the Minister eventually granted the request; but the notification of his assent did not reach the company until the month of October—when the holiday season was over!' ¹

This whole question has been very well summed up by President Hadley,² of Yale.

'It is an interesting fact,' he says, 'that a railroad which is owned and managed by the state, in its general policy is much more like our own railroads than is a road which is owned by a private company, but strictly controlled by state regulations. In the latter case, the state has no direct interest in making exceptions to its own rules.

¹ *Railways and their Rates*, E. A. Pratt, pp. 230-3.

² *Railroad Transportation*, pp. 200-1.

In the former case, it has. The rules which a state will make for itself are therefore less rigid than those which it will make for other people. This difference is strikingly seen in comparing the development of railroads in Belgium or Germany, where the state actually owned the leading roads, with that in France, where it merely controlled them. The former was much more untrammelled.'

In connection with this problem of rate regulation a very interesting and promising suggestion has been made by Mr. Bryan,¹ to the effect that, instead of asking the Government to work out all the infinitely delicate and complicated problems involved in the making of railway rates, Congress should so limit the profits of the roads as to keep the price of railway stocks at par. A similar suggestion was made by Senator Newlands to the effect that the profits allowed to the railways be limited to a reasonable percentage of the actual capital invested—perhaps six per cent. It is maintained that, if properly reinforced by provisions regulating railway capitalization, the salaries to be paid railway officials, and the methods to be employed in conducting purchases of supplies, rolling stock, &c., a plan of this general nature would bring about automatically a gradual and continuous reduction in rates.

Doubtless this contention is true, and if true it is important, but at the same time it seems very probable that such a system would have a tendency to become what the French call a 'régie désintéressé', a régime in which the managers would have very little if any financial incentive to build up traffic, to cut

¹ 'What the People should Demand of the Railroads': *Reader Magazine*, February 1908.

down expenses, and in other ways to increase the economic efficiency of their roads. In other words, it is difficult to see in what way such a régime would call out any more 'individual initiative' than would a régime of complete Government ownership and operation.

A THOROUGHGOING INVESTIGATION REQUIRED

No one who has made a careful study of the present attitude of the American people toward the railways, would be at all surprised to see them rise up during our next period of serious unrest and inaugurate a vastly more radical and far-reaching system of railway regulation than that which has just been outlined. As a matter of fact it is by no means certain that they would be content to stop at that. Owing to the traffic mismanagement, crooked stock manipulations, and intolerable insolence of some of our railway magnates, the sentiment among the masses in favour of stronger and ever stronger Government control, and, if necessary, of actual Government ownership, is steadily on the increase.

As shown again and again in the history of European railways and most strikingly in the cases of Prussia and Italy, it sometimes requires but a few short months to crystallize this vague unexpressed public sentiment into an irresistible popular demand, and to transform an almost unanimous political majority against Government ownership into an overwhelming majority in its favour.

Take the case of the purchase of the Prussian railways

by the State. Early in the year 1879 a proposition providing for State purchase was introduced into the Prussian Landtag, which, after long discussion, was rejected by a vote which was unanimous with the exception of one vote. But *less than six months after this wonderful victory*, a political landslide having occurred which sent to the Landtag a strong majority in favour of State railways, a measure was carried by a vote of 226 against 155 providing for the purchase of about 3,000 kilometers (or 1,771 miles) of railway. This measure also passed the Upper House before the end of the year, and thus suddenly and decisively was Prussia committed to a programme of State railway purchase.

For another and more recent illustration of the rapid and sometimes inexplicable way in which public opinion veers from one side to another on this question, take the case of Italy. On the 18th of May, 1903, a Royal Commission, following closely in the footsteps of the more famous Commission of 1878, brought in a report favourable to a continuation of private management of the Italian railways. In the Parliamentary debate on June 3, which followed the publication of this report, it was made very apparent that the Zanardelli Government and a majority of the Chamber of Deputies were in entire agreement with the recommendation of the Commission—while the minority favouring Government ownership was made up chiefly of Socialists and a few railway specialists, together with the small followings they could command. Moreover, on the 28th of the same month, the united Chambers of Commerce of

Italy issued a declaration in which they took their stand squarely with the Commission and the Government in favour of a continuation of the existing régime of company management. The unanimity of opinion among the 'better elements of society' was thus practically complete—and yet within a little less than two years, on the 22nd of April, 1905, a bill passed the Lower House almost without discussion, providing for the future management of nearly all the Italian railways by the Government after June 30 of that year. What is almost as strange as this incident is the fact that on talking with representative business men and statesmen of the different political parties in Italy to-day, one is surprised to find that scarcely any one, except a few interested financiers and their adherents, is any longer in favour of private railways. It would be hard to imagine a more rapid or a more complete revolution in public opinion.

As a result, however, of this *sudden* leap from a private to a public system of railway management, the inadequate, slow, and expensive railway service, which for two decades the companies had been palming off on a long-suffering public, suddenly manifested a tendency to grow worse rather than better—this intensely unsatisfactory condition of affairs reaching its climax with the arrival of the autumn season of crop transportation, about three months after the Government had taken possession of the road. The car famine which set in at this stage of the proceedings tied the whole industrial and commercial life of the country into a tight knot. A correspondent of the *London*

Times, in a special article on the subject, in a statement which contains perhaps as much truth as exaggeration, said : ¹

‘ In the first place, there are not enough cars ; secondly, there are not enough locomotives to draw the cars at their disposal ; thirdly, there are not enough platforms on which to load the trains for which there are locomotives ; fourthly, there are not enough freight dépôts in which to store the goods when they are unloaded ; and fifthly, there are not enough sidetracks to hold the trains which are waiting to be unloaded.’

This acute crisis was succeeded by a return of the chronic state of uncertainty and delay in the forwarding of goods, which had prevailed under company management, and which even up to the present time, has not been entirely got rid of. To be sure, practically all dispassionate students of the subject are agreed that the Italian Government gradually is solving the many almost insoluble problems which the corporation railways left behind as a vicious inheritance of their disastrous régime of railway mismanagement ; but at the same time, if the Italian Government before taking possession of the roads, had only had the foresight and common business prudence to perfect the necessary preliminary arrangements, not only for the creation of an efficient administrative organization, but also for the carrying out of a thorough rehabilitation of the entire railway system, the difficulties of the situation would have been met and disposed of one by one as they rose, and there need have developed no such

¹ *The Times*, January 30, 1906.

period of industrial confusion as that which immediately followed the inauguration of the new State régime.

In the light of these facts the ostrich policy of burying our heads in the sand and refusing to look the situation squarely in the face, would seem to be as stupid and as dangerous from the standpoint of the railways as it is from that of the general public. It becomes every day more apparent that unless some way can be found to make plain to the American people the danger involved both in *over* regulation and in a *premature* attempt at nationalization, we need not be at all surprised to see them, during our next economic crisis, take the bit in their teeth and insist upon the enactment of sweeping and hazardous innovations of the one sort or of the other.

In order to avoid this peril, there should be created at the earliest possible opportunity, either a committee of specialists under the general supervision of the Interstate Commerce Commission, or a board of investigators entirely independent of it, whose duty it shall be to carry on a profound and world-wide investigation of the whole question of railway transportation. This committee or board should have authority to summon witnesses from all parts of the country, and to secure the assistance of foreign specialists in the prosecution of its researches abroad. If properly constituted and equipped it could ascertain for the American people—first, the point beyond which any extension of Government regulation ceases to be a public benefit and tends to become a public peril; secondly, what kind of regulation, up to this point, is apt to prove the most

useful ; and thirdly, what would be the fairest, the most conservative, and the most business-like form of procedure for our Government, if, after having made a thorough trial of railway regulation at its best, the people finally should decide that this best was not good enough and that they wished to embark upon a policy of publicly owned and operated railroads.

If a Committee or Board of this general nature, composed of eminent authorities in whom the people could put confidence, were to be appointed and set to work at once, it would do more to allay needless and heedless future agitation than any other step which the Government could take.

CHAPTER IV

VARIETIES OF RAILWAY REGULATION

THE American people are practically a unit in their demand for an effective system of railway regulation. Unfortunately, however, their splendid unanimity of opinion goes no further than this somewhat indefinite community of purpose. When the question of ways and means is reached, a great variety of methods at once are proposed from all sides.

I. First come those who believe in 'publicity' concerning non-essential facts, together with a feeble show of governmental supervision, without actual government control. The mental processes of these estimable folk would make an interesting psychological study. Gentle waves of reform sentiment from time to time play lightly over the surface of their mental life, but without in any way disturbing the profounder and less fluctuating activities of their financial instincts. It is true that they honestly desire reform—but at no cost. Ordinarily they can be counted on to oppose all really effective reform measures, because of the temporary inconvenience or pecuniary loss to themselves, their friends, or their class, which such measures might indirectly entail. They are financially supersensitive—at times to the point of hysteria. They could be satisfied with considerably less railway regulation than

any civilized country—except our own—ever has found it possible to get along with.

II. A second category of regulationists is composed of those who believe in a vigorous uprooting of our worst positive abuses, so far as this can be done without the exercise of anything more than ordinary governmental police powers. Such is the position of a number of so-called ' Bourbon ' Democrats, who still hold fast to the slogan—' the least government is the best government '—an epigrammatic and resounding phrase which was full of significance a century or two ago, when government was synonymous with autocracy and tyranny, but which in these self-governing days has become almost as empty and obsolete as is the antiquated armour of mediaeval knighthood. The experience of England and Switzerland with this individualistic brand of railway regulation is both interesting and illuminating.

THE EXPERIENCE OF ENGLAND

Ever since 1842, when certain powers of supervision were conferred upon the Board of Trade, the English people have been striving to solve the apparently insoluble problem of how to secure effectual railway regulation, without first discarding their worn-out *laissez-faire* theories of political economy.

The present railway situation in England is highly unsatisfactory to every one concerned, and is steadily becoming more so. English industry, agriculture, and commerce, when in competition with continental rivals, find themselves seriously handicapped by their freight

rates which Mr. Acworth has been reported as pronouncing 'the highest in Europe'.¹ In spite of these high rates, however, the dividends received by English stockholders are strangely low, averaging for the past ten years under 4 per cent. It thus becomes sufficiently clear that, unless some radical change for the better can be made in existing methods of railway organization and management, the railway problem in England soon will reduce itself to a simple question as to which shall be sacrificed to the general good—shippers or stockholders.

This serious crisis is the result of three-quarters of a century of English 'individual initiative' and 'private enterprise' in railway construction and operation. From the very beginning English statesmen failed to recognize that the function of railways is a *public* function. Consequently in accordance with their old-fashioned and utterly impracticable idea of railway regulation by *economic* law rather than by 'mere man-made law'—or in other words, by means of competition rather than of appropriate legislation—a number of competing lines were built for which there then existed and now exists no economic necessity. This utterly needless duplication, at enormous expense, of tracks, terminals, and trains all over England, has increased correspondingly the cost of transportation.

The only hope for any real solution of their railway problem apparently lies in the complete abandonment of the *laissez-faire* competitive idea, and the substitution therefor of the principle of combination—the resulting

¹ *The Railways, the Trusts, and the People*, by Frank Parsons, p. 274.

railway monopoly to be placed under Government management or in the hands of a powerful corporation rigorously controlled by an even more powerful commission. It is possible that this latter plan may not appeal very strongly to those who are familiar with the history of English railway commissions in the past, for while these bodies have shown their ability to mitigate somewhat, existing transportation evils, they also have demonstrated their complete inability to abolish¹ these evils.

With the entire transportation system of the country under one management important economies could be made. A number of competitive trains could be laid off, a multitude of directors, lawyers, and employees of various sorts could be dispensed with, and even some unnecessary duplications of stations and lines of track could with great profit be consigned to the scrap-heap. But until the English people become ready for such heroic measures it seems highly improbable that they can obtain any permanent relief from their present transportation difficulties.

THE EXPERIENCE OF SWITZERLAND

During nearly half a century the Swiss people tried to work out for themselves a satisfactory régime of this sort of half-hearted railway regulation. At the start, in accordance with the then current theory of extreme 'states rights', this task was entrusted to the individual Cantons. The original charters were very much more exacting than our own. They not only required the

¹ See address by Sir George S. Gibb, before Royal Economic Society, November 10, 1908, on 'Railway Nationalization'.

70 VARIETIES OF RAILWAY REGULATION

approval by the Cantonal Government of the rules and regulations of the companies as well as of the general plan of the lines and the locations of stations, but also contained certain general rules regulating rates, speed of trains, and allowable delay in the delivery of freight, and finally provided that the roads were to carry the mails free, including packages not weighing more than eleven pounds, give the Confederation certain advantages in connection with the transportation of troops and war supplies, and assist in keeping the telegraph lines in repair.

As the Cantons failed to exercise their regulative functions with any degree of vigour or efficiency, disputes kept constantly arising between the Cantons and the railways, between individuals and the railways, and between the various railway companies. This state of transportation chaos finally became so acute that the Cantons were forced to take action, but the kind of regulation introduced during the late sixties, while not vigorous enough to accomplish much good, as a rule was found to be sufficiently ill-advised and ill-timed to do a considerable amount of harm.

The Federal Council in its message of June 16, 1871, in which it proposed that the function of railway regulation should be confided to the Federal authorities, called attention to a number of abuses and suggested remedies for them. In this important pronouncement the following reforms were advocated: (1) That one pattern of passenger car—preferably the American type—should be adopted on all Swiss roads; (2) That cars of all classes should be lighted at night, heated during the

winter months, and provided with curtains to protect passengers from the sun's rays ; (3) That cattle, while in transit, should receive proper attention ; (4) That all existing railways should be required to permit other railways to make necessary connections with their tracks and terminals ; (5) That a *uniform* signal service should be introduced on all lines ; (6) That time-tables should be subject to careful governmental supervision and that the railways should be required to adhere to them ; (7) That rates should be more strictly regulated with a special view to abolishing the widespread practice of discrimination and the bitterly resented custom of collecting so-called ' supplementary charges ', in addition to the legally established rates ; (8) That the liabilities and other responsibilities of carriers should be rigorously fixed by law in order to do away with the vicious habit which they had fallen into of dodging the greater part of such responsibilities.

In spite of the widespread Swiss belief in local self-government and ' states rights ', the bill proposed by the Federal Council soon found general favour and was embodied in the famous law of 1872, practically transferring the function of railway regulation from the Cantons to the Federal Government. This epoch-making reform in a way did for Swiss railways what the constitution of 1848 had done for Swiss politics ; substituted comparative unity of purpose and harmony of action for the antagonisms, misunderstandings and quasi-anarchy which had existed up to this time. Moreover, from time to time thereafter additional powers were conferred on the Federal authorities, until

72 VARIETIES OF RAILWAY REGULATION

finally, on June 28, 1895, as a climax to these efforts to secure effective regulation, a drastic law was passed authorizing the Confederation and each of the Cantons interested, to add from one to four members to the directorates of all roads of more than one hundred kilometers in length, and empowering the Federal Council to veto any vote of the directors or stockholders of all railway corporations.

The most striking thing about this Swiss railway legislation is the fact that, owing to the too successful efforts of the roads to prevent or delay the passage of sorely needed reform measures, reform always came too late to be satisfactory. The temporary success of the railways proved to be their final undoing. When, on account of the long-continued tyranny and arrogance of the roads, public sentiment at last had been aroused to such a point that the public was able, in spite of railway opposition, to inaugurate a vigorous policy of railway control, it was found that the people had been too deeply stirred to be satisfied with a programme of negative regulation, which merely corrected the most glaring railway abuses without securing the positive reforms demanded, such as higher wages with shorter hours for employees, and lower rates with improved service for the public. As a result, the demand for complete ownership and management by the Swiss people of their arteries of commerce became steadily more popular, until finally it was embodied in the railway purchase law of October 17, 1897, and was ratified by the astonishing referendum vote of over two to one.¹

¹ Other considerations, such as the dislike of having their railways

American railway managers would do well to ponder over this significant bit of Swiss railway history. It is a new demonstration of the old truth that while sheep-shearing is a process which sometimes can be indulged in repeatedly—sheep-skinning, for certain reasons totally beyond the comprehension of the average devotee of 'frenzied finance', is a process which, in the very nature of things, is extremely apt to stop itself with automatic precision.

III. Still another variety of regulationists, led by Mr. Roosevelt, is composed of those who demand positive and constructive as well as negative railway legislation. They favour the exercise by our national government of powers somewhat similar to those which, in a half-hearted way, the Italian Government exercised for twenty years, and which, with rather more success, the French Government has exercised for nearly three-quarters of a century.

THE ITALIAN BRAND OF REGULATION

After unsatisfactory experiences with both private and public ownership of railways, the Italian Government finally decided to follow the example of Holland and attempt a combination of the two. Accordingly, in 1885, it leased the roads to three large corporations for a period of sixty years, with the understanding that at the end of each period of twenty years the contracts might be cancelled by either contracting party.

owned by foreign stock- and bond-holders, had their influence on Swiss public opinion, but the determining factor unquestionably was the widespread popular dissatisfaction with private corporation railway management.

Some of the improvements embodied in the new régime not only resulted in giving more or less temporary relief to the long-suffering public, but also proved to be of real and permanent value as preparatory steps in the direction of eventual state operation. A new and complete code of transportation legislation was drawn up, rates were revised on a more rational and equitable basis, somewhat on the Belgian plan, many short lines were consolidated, a greater unity of administration was established for the whole kingdom, and the Department of Royal Inspection was so reorganized as to enable the Government to exercise more active and intelligent surveillance of the methods of operation employed. The financial provisions of the contracts, however, were not so satisfactory. In fact they were so distinctly favourable to the companies, and so distinctly unfavourable to the nation, that stockholders of the companies received respectively an average of 5.15 per cent, 6.53 per cent, and 6.65 per cent interest on the capital invested, while the nation, during the entire twenty years, realized practically no net profits whatever on its investment of over a billion dollars.

These grave financial losses, however, might have been sustained with comparative equanimity by being regarded as a form of subsidy necessary to the maintenance of an adequate transportation system, if the service provided by the roads had been even approximately satisfactory. But the really disastrous element in the situation was the thoroughly insufficient, inefficient, and expensive transportation facilities furnished the travelling and shipping public, just at the time

when adequate, prompt, and cheap transportation would have proved invaluable to the slowly-developing national industries. Any one caring for detailed information as to the railway situation in Italy during the last few years of company mismanagement should consult the report which a second Royal Italian Railroad Commission made to Parliament, May 18, 1903. It is an extraordinary document. The greater part of it consists of a voluminous and detailed account of the evils and inconveniences suffered by the Italian people during twenty long years of corporation management, while the conclusion, which supposedly the Commission has drawn from a careful study and consideration of all this damning testimony, is to the effect that this baleful régime should be given a new lease of life for a period of from twenty to forty years.

Some members of the Commission doubtless were honestly of the opinion, that in recommending this step they were choosing the lesser of two evils. They believed so stoutly in the *laissez-faire* theory of political economy that they were unable to see the situation as it was. This was their misfortune, for in the long run theories are fragile affairs when they come into open conflict with facts. In this case the orthodox economic theory as to the inherent advantages of 'individual initiative' and 'private enterprise' came into serious conflict with a particularly awkward fact which for years had been looming ominously on the Italian political horizon. It had been denied by political tricksters, it had been distorted by a purchasable press, it had been carefully and curiously explained by learned

professors of the 'dismal science', and it had been ignored by a Royal Commission, but in the end the ugly naked truth had to come out—the Italian régime of private railway management had been a dismal failure. Soon after this momentous fact had been brought to light, a strike of railway employees precipitated a political crisis, which resulted in the passage of a Bill, April 22, 1905, providing for State operation of most of the Italian railroads from June 30 of that year. Thus collapsed the Italian attempt to establish a permanently satisfactory system of State regulated corporation managed railways.

It was extremely unfortunate that so momentous a change should have been brought about as the result of a sudden and irresistible popular impulse, instead of as the result of a carefully thought out and vigorously carried out plan of political and economic evolution. It is because of the unpreparedness of the Italian Government for this entirely peaceable, but at the same time thoroughly revolutionary step, that Italy has suffered so considerable an amount of industrial inconvenience during the first few years of State management.

FRENCH EXPERIENCE DECISIVE

Interesting and important as may be the experience of other nations with railway regulation, it is only the experience of France which can be said to have been actually decisive. With her purely governmental prerogatives reinforced by immense proprietary rights, France from the very beginning made a serious and continuous effort to supervise and control railway con-

struction and management. With characteristic forethought the State, at an early date, made provision for the education of a corps of railway inspectors and engineers, which long has been recognized as without a rival anywhere in the world; and during nearly three-quarters of a century, successive ministries have striven, by means of ingenious decrees and complicated legal enactments, to reform abuses and otherwise to improve a system which is universally recognized as the high-water mark of European efforts at State regulation of corporation railways.

THEORY OF FRENCH SYSTEM

As the advocates of Government ownership had been unable to command a majority in the French Parliament, and as private enterprise had proved incapable of supplying the country with railways, it thus came to pass that France, during the period extending from 1852 to 1859, was practically forced to adopt her peculiar hybrid railway system. This system, in spite of important modifications incorporated from time to time, notably in 1863, 1868, 1875, 1879, and 1883, in its essential features has remained the same until this day. The theory of the system was simple and attractive. The railways were held to be a public service. As a consequence the State was to decide what roads were to be built, how they were to be built, and under what conditions they were to be operated. Moreover, the State was to be the heaviest investor and was to have the privilege of paying all losses. But in order that the roads might be run more economically and

78 VARIETIES OF RAILWAY REGULATION

efficiently than a state was considered capable of doing, they were to be turned over to a species of junior partner in the firm, i. e. the companies.

HIGH FINANCE IN FRANCE

The financial workings of this system have been far from satisfactory. The companies up to the present time have disposed of only 1,470,000,000 francs (\$294,000,000) worth of stock; the State has supplied capital to the amount of 4,643,000,000 francs (\$928,600,000), or nearly four times as much; and bonds to the amount of 19,417,000,000 francs (\$3,883,400,000) have been sold for 13,072,000,000 francs (\$2,614,400,000)—the total sum of money invested up to 1902 thus amounting to \$3,795,000,000. Of the \$294,000,000 worth of stock in the hands of stockholders, only a comfortable controlling interest was bought by the 'financiers' who promoted and built the roads, so that properties having a market value of over \$4,000,000,000 are thus controlled and made to subserve the private interests of men whose investment can be estimated at about \$150,000,000, or less than one twenty-fifth (1-25) of the total capital invested.

It is true that, as a result of the extraordinary generosity with the people's money shown by successive French ministries, the market value of the stock has risen from \$294,000,000 to over \$800,000,000. The State not only has guaranteed the payment of all bonds with interest at 4 per cent, but by the famous and infamous 'contracts of 1883' entered into an agreement guaranteeing extremely high dividends on all railway

stocks, as well as authorizing much higher dividends before any division of surplus profits was to be required.

To be sure, this guarantee appears not as a gift, but as a loan, to be repaid with interest at 4 per cent out of the first profits in excess of the guaranteed interest and dividends.

<i>Companies.</i>	<i>Dividends guaranteed by the State, per cent.</i>	<i>Dividends above which State begins to share excess per cent.</i>
Northern	13·5	22·1
Mediterranean	11	15
Orleans	11·20	14·40
Eastern	7·10	10·10
Western	7·10	10
Southern	10	12

ADVANTAGES OF FRENCH SYSTEM

Before undertaking to criticize the actual workings of the French system, let us first give the fullest possible recognition to whatever of good has been incorporated into it. Perhaps the strongest point in its favour is its comparative impartiality to shippers. There seem to be few if any French ' trusts ' which can be shown to be the direct offspring of a system of secret rebates or other means of discrimination. Favouritism unquestionably exists in France, but to an extent that is utterly insignificant in comparison with its flagrant and systematic practice by American railways. This comparative freedom from discrimination, however, is due not so much to efficient Government regulation and inspection as to the systematic prevention of all rail-

80 VARIETIES OF RAILWAY REGULATION

way competition, which has been a distinguishing feature of French railway policy from the first.

If on the one hand the State has been very generous to the companies during the lives of their charters, on the other hand it has shown real foresight and statesmanship in safeguarding the future. Between the years 1950 and 1960, by a mechanical process of purchase and retirement of their stocks and bonds, all the great railway lines will revert to the nation free and unencumbered. The only expense to which the State will be put at that time will be that of making provision for the purchase of the rolling stock. Moreover, in case the companies by that time have not repaid the interest and dividends advanced by the State, the amount due will be subtracted from the value of the rolling stock on hand. In Belgium, Italy, and elsewhere, it has been customary with the roads to prepare for State absorption by an almost total cessation of all expenditures on repairs of rolling stock or proper maintenance of tracks or stations. This has been done first of all because it was a direct economy; and secondly, and more important, because by swelling their incomes it increased enormously their purchase price, which according to the law was to be determined by capitalizing those incomes. Happily this game has been rendered impossible in France by a business-like little provision to the effect that five years before the expiration of their charters the Government, if not satisfied with the way in which the roads are being kept up, has the right to seize their revenues and expend them in putting the roads in good condition.

DISADVANTAGES OF THE FRENCH SYSTEM

It is very generally admitted that there is a serious lack of elasticity in the French system. On account of the friendly and even subservient attitude of successive French ministries toward the world of 'high finance', there has existed between the State and the roads no such chronic state of friction and litigation as that which prevailed in Italy during the greater part of the last twenty years, but at the same time the Government control exercised often has proved annoying, and sometimes has proved costly, to both the roads and the public. This can be attributed not to any undue official vigilance in behalf of the interests of the public, but to sheer official stupidity, red tape, and routine.

I was told by a leading French statesman that this fatal lack of elasticity places French industry at a great disadvantage in its competition with the industries of countries like Germany and Belgium, which are encouraged and aided in every reasonable way by their State-owned roads. The same laws and regulations which, under certain circumstances, prevent the roads from oppressing the French people, under other circumstances prevent them from granting those same people certain advantages which might prove profitable to both. And while the French Government is able to exert a very considerable influence on railway rates, that influence is by no means decisive. It has established a scale of maximum rates, and has reserved the right to veto any rate it considers excessive, even when it falls below that maximum, but, unfortunately, it has

no power to substitute what it considers fair and reasonable rates for the ones it has vetoed.

The question of comparative rates is a most intricate one. The comparison of the average price paid for carrying a ton of freight a mile or a kilometer, can give us only a rough approximation of the comparative freight rates of the different countries, on account of differences in the average length of haul, the kind of freight handled, &c. Nevertheless, until some one has made a sufficiently detailed study of comparative rates to give us the precise facts in the case, it is the best available means of comparison.

COMPARATIVE RATES IN 1901¹

Countries.	Average per kilometer per passenger.	Average per kilometer per ton.
France	3.68 centimes	4.71 centimes
Germany	3.34 centimes	4.43 centimes
Austria-Hungary	2.96 centimes	4.70 centimes

The average ton-kilometer rates for Belgium are not given, but as both friends and foes of Government ownership are agreed that the rates of the Belgian State roads are, and always have been, the lowest in Europe, the exact figures are not at all essential.

In a discussion of comparative rates in the *Revue Économique Internationale*,² the following interesting comparison was made of the German and French rates charged for the transportation of fish. In Germany shippers pay for slow freight, but the fish goes as fast

¹ *Abregé de la Législation des Chemins de Fer*, Colson, p. 195.

² April 1906, 'Chronique des Transports.'

freight. The ton-kilometer never costs more than $15\frac{1}{2}$ centimes, is generally between 12 and 7 centimes, and sometimes is reduced to only 6 centimes. On the other hand, the French companies charge 23 and 22 centimes a ton-kilometer for short distances, 19 centimes for long distances, and very exceptionally 18 or 17 centimes. Some of the companies have even made a rate of 15, 14, and $13\frac{1}{2}$ centimes for distances of over 1,000 kilometers. In other words, the French roads charge nearly twice as much as the German for the transportation of fish—thus working a great hardship on that particular French industry. But that is not the worst of it. Many of the other French industries suffer in a similar way, owing to the fact that French railways are run primarily for the profits of the stockholders, while to a certain extent German roads, and to a much greater extent Belgian roads, are run primarily to build up the national commerce and industry. It must be admitted that French rates are lower than German rates on some articles, notably on coal and iron, but it must not be forgotten that in practically every such instance the rates of the Belgian State roads are still lower.

Another striking illustration of the irreparable harm done to French interests by the present régime of French railways, is the well-known fact that the low rates and good service given by the Belgian State roads have made Antwerp one of the most important ports in the world, whereas Havre and Dunkirk, on the French coast, owing to the less favourable rates and service offered by the French corporation railways,

never have attained more than secondary importance. For example, when a French vessel, commissioned and manned at Dunkirk, goes to Chile and brings back a load of nitrates, undoubtedly, other things being equal, it would land this cargo at the familiar home port. But other things are not equal. It is true that the inhabitants of the town have furnished all the needful facilities for loading and unloading vessels, but one essential thing is lacking—cheap transportation into the interior of the country. Freight rates from Antwerp to French interior towns on many kinds of freight are from $12\frac{1}{2}$ to $33\frac{1}{3}$ per cent cheaper than from the French port of Dunkirk to the same French towns.¹

When the Dunkirk Chamber of Commerce protests, the following is the habitual response from the 'Eastern' Road :

'If we lower our rates, there is no doubt in our minds that the Belgian roads would do the same and perhaps would make greater reductions than we had. Evidently, it is to the interest of our companies to keep out of any such contest.

'The companies,' continues M. Paul Leon, 'admit freely that a serious injury to French commercial and industrial interests results from this situation, but they place their own financial interests above all interests of this general character.'

'That an increase in the number of connections between the railways and the waterways would be to the advantage of commerce,' wrote a director of a French railway recently, 'does not admit of a doubt ; that it would be advantageous to the waterways is equally certain—but advantageous to the railways ?—that is another affair !'²

¹ *Fleuves, Canaux, Chemins de Fer*, by M. Paul Leon, p. 49.

² *Ibid.* p. 127.

STATE REVENUE FROM RAILWAY TAXES

These losses to trade might be borne with more or less equanimity, were there compensating advantages to the State in the form of revenues from taxes ; but there are practically none.

The French Government receives from the railways of the country in taxes, including the revenue from railway values in the form of income and inheritance taxes, only about \$33,000,000 a year. On the other hand, in addition to the interest it is losing every year on the huge investments it has made directly from the national treasury, the Government still pays out annually \$25,800,000 as interest on money borrowed to sink in the railways. In addition to this, it pays out yearly to the companies \$18,000,000 in annuities, and a million dollars expenses in connection with its system of inspection and control. Thus in all, the State receives from the roads \$33,000,000 a year, and spends on them \$44,800,000—making a yearly deficit of \$11,800,000.

It would be unfair, however, to overlook the very considerable ' economies ' realized in France in connection with her railways. In the United States, the Government pays more for the carrying of our mails than individuals or corporations would have to pay for the same service. In France it is the other way, the State pays much less than the normal price for the transportation of mails, soldiers, sailors, or custom-house officials. It is estimated that on all the various public services the State realizes a yearly net saving of

86 VARIETIES OF RAILWAY REGULATION

about \$18,000,000. Allowing these economies at their full value, and deducting from them the yearly deficit of \$11,800,000, there remains to the State as its profit from an actual investment of \$928,600,000, together with its income in taxes on property worth over \$4,000,000,000, the paltry sum of \$6,200,000 a year. This puny result stands out in glaring contrast to the enormous returns received by the German States on their railway investments. After deducting the local taxes paid into the local government treasuries, the single state of Prussia has a net profit for 1905 of over \$130,000,000.

To be sure, every year a certain number of French railway stocks and bonds are being bought up and cancelled automatically, in order that all the private capital invested in them may be withdrawn by 1960, and the roads handed over to the Government free and unencumbered. The roads spent \$27,497,415 in this way in 1901. But this process is not peculiar to France, as all the nations which have State railways likewise devote a certain sum each year to the liquidation of their bonded indebtedness. As a matter of fact, this amount is very much more than offset in France by the interest the State is losing every year on its railway investment of \$928,600,000, on which, as I have already stated, it realizes not a cent of income. At 4 per cent this interest would amount to the enormous sum of \$41,984,000.

Here the question inevitably arises—how can these things be? How is it that the commercial, industrial, and fiscal results of this splendid system of Government

control of corporation-managed railways are so unsatisfactory? A corps of inspectors, all of whom are highly trained railway specialists, and all of whom are armed with extensive legal powers, seemingly ought to be able to secure an ideal railway administration. But that they do not is admitted by a majority of the French people as well as by foreign critics of all schools of thought. We find rates so high as to injure French commerce, rate schedules so inelastic as to make competition with German and Belgian competitors extremely difficult and sometimes even impossible, and yet the returns to the State in the form of taxes are practically nil. This highly unsatisfactory condition of affairs is all the more astounding when one considers the vast machinery of supervision which has been created to prevent it. For nearly three-quarters of a century the fertile minds of French lawmakers and officials have exhausted effort to devise new clauses for their contracts, and new laws and ministerial decrees for the perfection of this already highly elaborate system. *But the attempt to make up in ingenuity what a system lacks in vitality is vain.* The experience of France with railway regulation, like that of Germany, Austria, Hungary, Denmark, Switzerland, Italy, and of every other country that has tried it, goes to show that while such regulation is a step in the right direction, and a highly important phase in the economic and political education of a nation, it is not, or at any rate it never yet has proved to be, a satisfactory final solution of the railway problem.

In the light of these facts it seems hardly surprising

that one of the most important planks in the platform of the Radical party, which the French elections of May 1905 swept into power, was one in favour of the purchase and operation of French railways by the nation. Several months before these elections the recent Premier, M. Clemenceau, told me that he was as intensely in earnest about this and the other so-called 'Socialistic' planks in the Radical platform as were the most fanatical of the Socialists. 'The difference between our attitude and that of the Socialists,' he said, 'is that while they pretend to know all the minutest details concerning a future so far distant that nothing definite can be known about it, we demand reforms that seem to us realizable by this generation and about the desirability of which this generation therefore would seem to be a competent judge.'

As the 'unified Socialists', however, inspired by 'Citoyen Guesde', a revolutionary fanatic, have refused to unite with the Government in its efforts to carry out a programme of practical social reform, and as many prominent Radicals, far from being in agreement with M. Clemenceau, are either very lukewarm on the State railway proposition or actually opposed to it, there is slight probability of any serious attempt being made very soon to bring about the purchase of the entire system of French railways. On the other hand, as the majority of Radical electors are so serious in their demand for immediate action that an open and barefaced repudiation of Radical pre-election pledges might drive a half million of them into the ranks of the Socialists, the purchase by the Government in the near

future of at least one more ¹ line of road has long been inevitable.²

This decision of the French people is the most significant event that has occurred in the recent railway history of the world. The fact that of all the European countries which have tried a policy of Government regulation, France has had the longest experience and has scored the nearest approach to a success, gives to her final decision against it a significance which cannot be overlooked or set aside.

WHY REGULATION FAILS

If the Minister of Public Works and the rest of the Cabinet, together with the Government majority in the House, were independent and free from railway influence; if the friendships, prejudices and financial interests of the head State engineers impelled them to think and work first, last and all the time, in the interest of the nation; and if all the little subordinate inspectors were animated solely by the desire to force the railways to live up to the spirit and letter of the law,—Government control in France would be productive of strikingly different results. Unfortunately, however, in France as in England and America, or *wherever private railways exist*, these roads by the use of both fair means and foul, have acquired an extraordinary influence over

¹ Since 1878 France has had a splendidly managed line of State railways. But this line, composed of little bankrupt roads, came into Government hands rather by hazard than as the result of a deliberate decision by the French people to establish a system of Government railways.

² The bill providing for the purchase of the 'Western' line became law on its passage by the French Senate, June 27, 1908.

politicians and Government officials, big and little.¹ On account of this fact railway students and specialists are slowly coming to see that there is incomparably more political corruption in connection with the private corporation-owned railways of America, France, and England, than with the State railways of Belgium, Germany, and Switzerland, and that really efficient and satisfactory Government 'control' of corporation railways is a more difficult proposition than is the plan of complete State ownership and operation.

IV. The fourth general category of regulationists includes a large number of men, who, like Mr. Bryan, are individualistic rather than socialistic in their political philosophy and who consequently are averse to any extension of the sphere of government, except in case of absolute necessity. These men believe that in working out a solution of the railway problem, our present efforts should be directed toward the creation of the most effective possible system of state and national railway regulation. If a satisfactory system of this sort could be obtained, they unquestionably would be as glad as any one to 'let well enough alone'. But they are not ignorant of the fact that no such satisfactory system of railway regulation ever has been worked out by any nation in the world. They see clearly, and they have not hesitated to say just as clearly, that our chances of arriving at a permanent solution of the railway problem in this way are not

¹ As early as 1838 the inevitable nature of this result was pointed out by Lamartine, in a masterly speech in the French Chamber of Deputies. See Appendix, No. 1.

overly bright. Moreover, they have not blinked or balked at this point, but following out their chain of reasoning to its logical end, they have arrived at the absolutely inevitable conclusion that, whether we like it or not, *if regulation fails* the only other possible solution is Government ownership.

THE AMERICAN SITUATION

As to the railway policies of Mr. Roosevelt and Mr. Bryan, it is difficult to say in detail on just what particular points they differ. When, however, the former advocates more regulation as the best means of checking the present rapid trend of public opinion in favour of immediate Government ownership, and Mr. Bryan advocates more regulation as a step in the direction of ultimate Government ownership, to most people there seems to be manifested an irreconcilable difference of opinion. This is not necessarily true. In fact, both are right. Mr. Roosevelt undoubtedly is correct in his contention that if left unchecked, our present-day railway abuses may call forth at any moment an irresistible popular demand for immediate Government ownership. On the other hand Mr. Bryan was just as incontestably right when he indicated that a sincere and vigorous exercise of our powers of Government regulation would be the best kind of a preparation for the future purchase and operation of a system of Government railways.

It thus begins to look very much as though the apparently wide difference of opinions between these two most conspicuous champions of railway regulation

arises largely from the fact that they have approached the problem from totally different points of view. While Mr. Roosevelt has concerned himself chiefly with the first practical steps to be taken in the matter, Mr. Bryan, after a careful consideration of the entire problem, has declared for an ultimate ideal, toward which he believes the efforts of hard-headed practical politicians should be directed. It thus becomes apparent that their difference of opinion on the question of ultimate Government ownership is largely academic, while their agreement as to the desirability of more effective regulation is so eminently practical, as already, in connection with the Rate Bill of 1906, to have exerted an important influence on legislation.

But more than that, it is by no means certain that this difference of opinion on the academic question of Government ownership is to be a permanent source of controversy between them or their followers. So far as I am aware, Mr. Roosevelt never has stated just what his policy would be in case he should fail to secure a 'square deal' by means of Government regulation. But as he must be aware of the unfavourable results of the experience of other nations with this method of 'State interference', it seems not improbable that he has given the question much consideration. Moreover, no one who is at all familiar with the psychological make-up of our former President could believe for a moment that he would throw up his hands and acknowledge the railway problem to be insoluble, because the first solution tried, proved to be only a first step toward a solution rather than a solution in itself. In other words, it looks very

much as though Mr. Roosevelt, slowly and perhaps unwillingly, may yet be forced to participate in the apparently resistless worldwide movement in the direction of Government ownership of railways.

In the last analysis it becomes very clear that the only really vital difference that exists between the various categories of believers in Government regulation of railways is the fundamental line of cleavage between those on the one hand who favour special interests, and those on the other hand who are working for the welfare of all.

Unfortunately, our railways from the very first have fought steadily, bitterly and in a great majority of cases successfully, practically all efforts, whether State or National, to bring about effective Government regulation. At the present moment, having discovered that this plan is no longer feasible, they have adopted another and apparently very promising one. It looks as though in the future their energies would be concentrated upon the effort to so regulate Government regulation as to leave it at once more or less acceptable to the people, and at the same time safe and satisfactory to themselves. Thus apparently we are about to see the railway history of the nations of continental Europe repeating itself in our midst. If railways in the past had not succeeded so well in their efforts to poison legislation at its source, and to impede and cripple in every possible way its ultimate enforcement, the railway history of continental Europe might not have been a history of the gradual substitution, by nation after nation, of Government ownership for Government

regulation of railways. But however that may be, the fact is that the list of countries in Europe and elsewhere, which have followed this line of procedure, is so impressive as to be almost startling—including as it does Germany, Austria, Hungary, Russia, Denmark, Switzerland, Italy, Japan, and Mexico, together with Holland and France, which at the present time are preparing to follow suit. Moreover, this list might be made much larger if there were included in it the other countries, such as Belgium, Norway and Sweden, Natal South Africa, New Zealand and the Australian colonies, which either began with State roads, or for some reason adopted a Government régime before making a protracted trial of a system of private railway monopoly.

Mr. Roosevelt undoubtedly is right in holding that *if* railway managers would but co-operate loyally with the Government in its efforts at railway regulation, such regulation might prove as satisfactory to all parties concerned as most things are apt to prove in this world. But that greatly to be desired loyal co-operation on the part of railway managers is precisely what has been most conspicuously lacking in every attempt of the kind so far recorded in the railway history of the world. Of all the suggestions that have yet been made for the solution of the transportation problem, perhaps the most visionary and Utopian is this naïve anticipation that the persons who are to be regulated can be relied upon to give the help necessary to render that regulation effective.

While at the present moment our railway magnates are on their good behaviour and while in all probability

they will endeavour to remain so, as long as our Interstate Commerce Commission can count on the backing of an honest, courageous and able chief executive supported by an invincible public opinion, yet there seems to be no reasonable ground for supposing that any very considerable number of them have experienced a change of heart, or that in forsaking their evil ways they have yielded to anything but an unexpected exercise of superior force. In view of the splendid storm of public indignation which has been aroused as a result of their long and incredibly profitable career of financial malpractice, they very wisely have decided to take a reef or two in their sails. But who can doubt that as soon as this storm shall have spent its force, they will be found ready and anxious once more to resume operations in the agreeable and profitable old time way. Knowing as they do from long experience, that the moral enthusiasm of a nation cannot long be kept at white heat, they are biding their time, some snarlingly, some sullenly, and some with the jovial serenity manifested by a boa constrictor that has swallowed a calf and is chiefly anxious to hold what it has got 'and no questions asked'.¹

If these gentlemen were as sincere as their apologists would have us believe, in their desire to co-operate with the Government in the great work of railway regulation,

¹ The present attitude of the roads as shown by the late Mr. Harriman in the famous 'Harriman case' when he refused to answer the questions of the Interstate Commerce Commission, can be best understood perhaps by invoking the very simple principle laid down in the words: 'For every one that doeth evil hateth the light, neither cometh to the light lest his deeds should be reproved.'

they would not have made such herculean efforts, first, to undermine the influence of the only President who has dared to proclaim the reign of law and justice within the precincts of our financial jungle, and secondly to nominate as his successor a 'conservative' and pliable believer in the sacred right of property to gravitate from the hands of the producer into the pockets of the privileged and predatory classes. Moreover, if they were as clear of vision as they commonly are supposed to be, they would have begun to realize long ago how rapidly the sentiment in favour of Government ownership is on the increase, owing to their intolerable and inexcusable methods of railway mismanagement. In fact, so marked of late has been the trend of public opinion the world over in favour of Government ownership, that the chief duty of its advocates would seem to be no longer that of making converts to their doctrines, but rather the more difficult and more important one of finding out and explaining to the American people just how, step by step, the socialization of our transportation facilities can be brought about in an entirely fair, conservative and businesslike way.

There is no danger of this change being brought about in any other way, unless the reactionaries should succeed in putting a stop to the gradual adoption of seasonable and reasonable reforms and thus should force the people to the extremity of choosing between stagnation or reaction on the one hand, and on the other—progress with a rush, as the result of a sudden and irresistible popular impulse.

The really conservative statesman is not the man who, ostrich-like, buries his head in the sand and refuses to recognize the everyday more apparent world-trend toward the public ownership and management of railways, but rather he who, foreseeing our manifest destiny, proceeds to do everything in his power to insure that our progress in that direction shall be made by statesmanlike and orderly stages.

The only safe path in the direction of Government ownership is long and steep and thickly strewn with difficulties. In order to reach that goal without unnecessary cost or confusion, there will be required, first, a powerful and steadfast public sentiment, secondly, astute and courageous political leadership, and thirdly, time: these three, but the greatest of these is time.

CHAPTER V

RAILWAY NATIONALIZATION NOT CONFISCATORY

CONTRARY to the prevailing opinion, the nationalization of our railways would work no hardship to owners of railway stocks and bonds. All talk about confiscation of railway properties, whether it be indulged in by anarchistic fanatics, or by frenzied financiers, is both hysterical and absurd. So far as I have been able to discover, there never has been a case on record in any part of the world where a Government, on purchasing a railway from private individuals or from a corporation, has paid less for it than it was worth. On the contrary, a number of instances are on record where the Governments have given not only more than the roads purchased were worth, but more than they legally were required to give.

It may be just as well to state at once that, from the standpoint of the public, the weakest spot in State railway management has always been found to be in connection with the original purchase of railways by the Government. In practically every instance, Government officials have taken exaggerated pains not to allow themselves to override the just claims of the railways by any arbitrary exercise of the political powers of the State. Sometimes from the highest

motives, and sometimes from less commendable ones, Governments have been found to err on the other side, by giving the companies the advantage of every doubt. An example of this sort of excessive governmental generosity is to be found in the action of the French Government in 1848, in connection with the line from Paris to Lyons. In 1847, in order to help the road out of its financial difficulties, the State gave it a new and more favourable charter, together with substantial financial support, and when, in 1848, there was a recurrence of the trouble, the Government took over the road, of which the price of stock had fallen from \$50 to only \$7 a share, and magnificently reimbursed the stockholders for all losses in gilt-edge Government bonds.¹ That this is by no means an isolated example of this sort of thing in France, is shown by the strikingly similar arrangement made in 1878, when a number of little bankrupt and unfinished lines were bought up by the Government at the original cost of construction² and made into the present 'State line'.

One of the worst recent instances of this form of paternalism gone to seed, is the case of the purchase of the 'Grand Central' railway by the Belgium Government in 1897. While the most important and valuable part of this system was purchasable in accordance with the provisions of its charters, certain other comparatively unimportant local lines, having no such provisions in their charters, could only be bought by means of a business agreement.

¹ *Les Chemins de Fer Français*, Grippon la Motte, p. 116.

² *Ibid.* p. 265.

If the State had stood firmly on its legal prerogatives, and had insisted upon buying the trunk lines of the system according to the provisions in their charters, the company, as every one admitted, would have been forced to sell, for any reasonable price offered, the little branch and local lines, which could not have been run advantageously alone.

But the Government, although completely master of the situation, feebly hesitated, quibbled, and finally declared that it did not seem quite fair for the State to assert its legal rights and take the road at the generous price provided for by the provisions of the charter. As a result of this worse than supine attitude of the Government, the officials of the road demanded that the entire system be bought on a purely commercial basis, wholly without reference to the purchase provisions of the charters. This the Government finally agreed to do, and a purely commercial and most unstatesmanlike understanding was arrived at, which allowed the company an exorbitant price for its property.

Among other things, the State capitalized two-thirds of the intercalary interest on the road's current banking surpluses, as well as two-thirds of the premiums, in the form of a percentage of its profits, which were allowed the directors as a part of their salary, and which, thus, unquestionably were a part—not of the profits of the road—but of its operating expenses. These are only two of the many ways in which the road was permitted to pad its profits account. Moreover, the road made an artificial and exaggerated financial showing, by seeing to it that no money whatever was spent on the

installation of life-saving devices, repairs, maintenance of way, or in keeping the rolling stock up to date, except as such expenditures were imperatively demanded from day to day. The 'stitch in time that saves nine' was carefully omitted, and the economy thus realized was added to the profits account and later capitalized. But that was not the worst of it. For every dollar gained by the roads from this criminal economy and penuriousness, the State lost tenfold when later it had to go to an enormous expense for the purpose of putting the road once more into good condition. Moreover, the hours of labour on this road were long, and the wages of employees were kept down to the starvation point, so that M. Vandervelde, the eloquent and scholarly leader of the Belgian Socialist party, was able, in his speech in the Chamber, June 18, 1897, to say truthfully that 'the Government was capitalizing, as profits of the road, money extorted from its underpaid workmen'.

A COMPLICATED AND DIFFICULT PROBLEM

The purchase of a railway by a Government is an extremely complicated and difficult affair at best—in fact, it is the most difficult step involved in the change to a régime of Government railways. Moreover, since it is the first step, the one which has to be taken before Government officials have had any experience with the management of State railways, it is of the greatest possible importance that it be preceded by a period of preliminary training in connection with a system of vigorous Government regulation, as well as by a campaign of premeditated and carefully planned out

preparation for the future purchase and management of the roads by the State. Government officials who are called upon to conduct such a purchase have a double responsibility, that toward the stockholders, and that toward the general public. They are expected to find the happy medium between forcing the road to sell too cheaply and of being forced by it to pay an unreasonably high price. The capital involved is so vast that any slight alteration, one way or the other, of the method of determining the value of the roads, involves so many millions of dollars of the people's money that the Government which is called upon to conduct the negotiations should not only be honest and able, but should not be called upon to undertake so colossal a task without being given every reasonable opportunity to conduct the necessary preliminary investigations and to work out in detail, with the aid of competent specialists, the necessarily elaborate financial calculations.

However much some of our very best citizens may be opposed on principle to Government ownership of railways, I take it that in case we ever should decide upon a policy of railway nationalization that there would be and could be no difference of opinion among honest and intelligent men, about the advisability of bringing about this great reform in the fairest and most businesslike possible way. Therefore, as it is becoming every day more apparent that our people may, at almost any time, decide to go in for a régime of publicly-owned railways, it is of capital importance that as much light as possible be thrown on the peculiarly knotty problems connected with such a purchase.

THE EXAMPLE OF FRANCE

While France in the past has been very lavish in its generosity toward railway companies which were in financial difficulties, or which were afraid, or pretended to be afraid, that they were in danger of getting into such difficulties, the French Government at least had the foresight and the statesmanship to make a business-like provision for the future. It is no small matter that between the years 1950 and 1960, by an automatic process of purchase and retirement of their stocks and bonds, all the great railway lines of the country will revert to the nation free and unencumbered.

This interesting French plan, which has been described in such detail and even too eulogistically by Mr. Richard Kaufman¹ was, not to have the State buy the roads on credit and pay for them gradually out of the profits, but to let private industry run them and gradually buy up and cancel, in the name of the State, all outstanding stocks and bonds, so that at the termination of their charters the entire system would revert to the State without money and without price. This policy, which in some important particulars at least has not worked as well as the Belgian-German-Swiss method of direct State purchase and management, has yet many advantages over our American scheme of having no plan whatever, but of drifting blindly for half a century, and of still believing credulously in the magical effects of competition, several decades after the rest of the world has come to know that attempted compe-

¹ *La Politique Française en Matière de Chemins de Fer.*

tition in railway transportation not only is bound to be fabulously expensive, but is certain to end in failure.

PRUSSIAN METHODS OF PURCHASE

The experience of Prussia in preparing for and in carrying out the purchase of its railways is very instructive. Under the guiding hand of Prince Bismarck, aided by Albert von Maybach, it managed the purchase of the railways with a degree of fairness to stockholders that approached generosity, and yet with such business-like skill and energy that the Government apparently got full value for the capital invested. In accordance with Section 42 of the law of November 3, 1838, the State had the right, according to the usual continental custom, to repurchase the roads by paying the company 'twenty-five times the average net earnings of the five years immediately preceding the date of purchase'.

But as large amounts of capital had been invested on which no immediate returns were possible, the authorities, believing that the purchase price determined in this way would not be fairly remunerative to stockholders, decided to forgo the exercise of their legal rights and to conduct the purchase by means of friendly negotiations in which every element of real value, such as the legitimate future prospects of the roads, would be given due consideration. Boards were appointed by both parties interested, to confer and, if possible, to arrive at a satisfactory understanding. In order to avoid the necessity of carrying out in too great haste such vast and complicated transactions,

agreements were entered into by which certain of the companies, in consideration of a fixed revenue, gave the State possession of their roads, together with the right to purchase them at its convenience. The State was to assume the indebtedness of the roads and to pay the stockholders a certain amount per share in money or in Government bonds.¹ As a result of this understanding very little actual money changed hands, for most of the stockholders were glad enough to take in payment the gilt-edge State bonds offered, bearing $3\frac{1}{2}$ or 4 per cent interest.

Of necessity, a variety of methods were utilized in dealing with the various roads, but, roughly speaking, the roads were divided into two classes, those which had been paying regular dividends, and those which had not. As a rule, the State offered a price for which stockholders were quite willing to sell. As an illustration of the eminently fair and yet strictly businesslike spirit in which negotiations were conducted, take the case of the purchase of the Berlin-Potsdam-Magdeburg railway :

² ' At the second meeting of the joint commission the government representatives, on behalf of the department of public works, offered to make an even exchange for the railway stock of government paper bearing $3\frac{3}{4}$ per cent interest. The representatives of the company asked for a dividend of $4\frac{1}{2}$ per cent. At the third meeting the government raised its offer to a dividend of 4 per cent. The issue was joined upon this point of a 4 or $4\frac{1}{2}$ per cent dividend. In other words, the question was one of net earnings as

¹ *Étude comparé du Droit de Rachat*, by M. Paul Deligny, p. 38.

² *Commercial Valuation of Railway Operating Property*, Professor B. H. Meyer, pp. 68, 69.

indicative of the cash value of the railway system. The railway board of directors expressed its willingness to recommend to the stockholders the sale of the property at a dividend of $4\frac{1}{2}$ per cent, but refused to do so on a 4 per cent basis. There was no dispute in this stage of the proceedings regarding the amount of the stock and bonds of the company to be exchanged. The only question was that of the rate of return, or dividends.

‘It was admitted that the railway had not quite earned the 4 per cent which the state was willing to give, during the last few years; but there were other considerations which tended to demonstrate an earning capacity in excess of 4 per cent on the part of the road. Among these considerations, stripping them of their local and detailed applications, were the following :

‘1. The railway is not burdened with obligations to construct additional lines. Authority to issue preferred shares for the only connection still to be constructed has already been granted.

‘2. Most of the holders of the railway shares acquired them as permanent investments and the prospects for increased future profits are good. The present (1879) is a period of depression, and there is every prospect of an increase in traffic and hence, also, of dividends. It may be stated as an economic law that the volume of railway traffic is continually increasing and that crises like the one from which Germany was suffering at that time can only temporarily interrupt the working out of this law. The Berlin-Potsdam-Magdeburg railway serves a territory which is full of promise for the future. It connects growing trade centres with other leading and growing cities.

‘3. An increase in the passenger traffic must be regarded as certain because of the growing importance of the suburbs of Berlin, especially Potsdam.

‘4. The rate of dividends paid to stockholders during past years is not the real rate which the company was capable of paying, for the reason that nearly 4,000,000

marks have been paid into a renewal fund. Even during the years of the prevailing crisis, with a falling off in both passenger and freight earnings, payments into the renewal fund have not been suspended. Besides, heavy payments have been made into the amortization fund.

‘ 5. The potential power of the competition of the lines already acquired by the state in connection with co-operating private lines has been exaggerated. This competition has hitherto resulted in a division of the traffic, and whatever increased losses in traffic the Berlin-Potsdam-Magdeburg Company may suffer in the future will be more than offset by the probable increase in traffic. At any rate, the threatening competition affords no cause for the sale of the property at a price lower than an annual dividend of $4\frac{1}{2}$ per cent.

‘ In the report of the legislative committee appointed to draft a bill for the purchase of the Berlin-Potsdam-Magdeburg railway and the Rhenish railway, the following points were put forward as basal in determining the purchase price :

‘ 1. The amount of money which the company has invested, including specified *fonds perdu*. Figures are given.

‘ 2. The “most important factor in valuation” is the *rente* (dividends) which the company has been paying, especially during the last few years.

‘ 3. The probable change in the rate of return or dividends as a result of the purchase of this railway by the state.

‘ 4. The more favourable rate of interest which the state can command.

‘ 5. The extent to which the acquisition of the railway in question is necessary for the successful execution of the state programme.

‘ In its treatment of the Rhenish railway the legislative committee states that a mere glance at the map will show that the “lines of the Rhenish Railway Company are the most important and valuable” of all the lines which the

state ought to acquire. Attention is called to the great international commerce which this railway system commands between Belgium and the Netherlands and the middle and upper Rhine, and from this region with middle and South Germany. The system has connections with the North Sea and the lower Weser ; with Luxemburg, which is a place of military importance ; southward again with the Moselle and Saale, and through these with the federal domains of Alsace-Lorraine. By means of these connections with the German federal railways and the railways of Hesse and Baden, the Rhenish lines have access to the commerce of Switzerland and Italy, &c. In a word the legislative committee puts into the foreground the valuable traffic connections of this railway system in getting at an estimate of its value. Of course, other considerations like those mentioned above in connection with other systems are not excluded.

‘ The memorial relating to the repurchase of the Berlin-Stettin Railway is divided into a number of parts, dealing with the matters indicated below :

‘ Part I contains a list of the lines operated by the company, the length of each, and the date of opening ; and similar facts relating to branch lines upon which the state has guaranteed interest.

‘ Part II contains a statement of the original cost of construction (*anlagekapital*) as represented by the authorized issues of common and preferred shares for the different parts of the system, classified into seven different issues. In this connection an account is also given of the manner in which net earnings are determined for the different parts of the system and the method of bookkeeping followed under the legal provisions relating to interest guarantees ; in addition an itemized statement of the sums advanced by the state in interest guarantees is shown.

‘ Part III is devoted to a consideration of traffic and operation conditions, embracing a statement of the territory served by the railway, leading cities and junction

points, traffic connections, chief industries served along the line, proportion of freight and passenger traffic, traffic agreements, operating arrangements with other lines, union stations, &c.

‘Part IV. The railway and its price (*kaufobjekt und kaufpreis*). (1) The price of items included in Part I above and real estate not devoted to operations ; (2) the price of the equipment ; (3) the company funds, such as reserve and renewal funds, pension, relief, and sick funds ; in short, a detailed balance sheet.

‘Part V. The financial significance of the repurchase to the state. In these rather extended paragraphs the results of the operation of the railway are treated and an estimate made of the probable returns to the state. Branch lines, the nature and extent of competition, harbour facilities and connections, general operating conditions in relation to the general business conditions, train service and operating expenses, financial obligations to other enterprises, the economic ties between main and branch lines, influence of this railway upon existing state lines, and analogous topics are treated with considerable minuteness. A large, detailed analytical table of earnings, expenses, and net earnings, the various funds, and surplus is appended.

‘Exactly the same method of investigation and procedure was followed in the case of three other lines purchased by the state at the same time.’

While in this way the Government strove to be scrupulously fair to stockholders, at the same time, in striving to protect the interests of the State, it acted with great business prudence, energy, and skill. Its aggressive business initiative was well illustrated in the case mentioned by M. Picard,¹ in which the Government, while negotiating directly with railway managers, arranged to have large blocks of stock bought secretly

¹ *Traité des Chemins de Fer*, vol. i, p. 680.

for it at the regular market price by banking syndicates, which bound themselves in writing not to let any one know for whom this stock was purchased. Moreover, when the market rates for stock seemed to be getting unreasonably high, sufficient influence was brought to bear by means of the official press and newspapers that were friendly to the Government, to depress the market and thus keep down to a reasonable level the prices of railway securities. As another indication of the fairness with which stockholders were treated, we have the interesting fact mentioned by the late Professor Frank Parsons¹ that :

‘ The shares of the railways rose considerably in prospect of the purchase, owing to the superior certainty of state securities and the probability of the stoppage of destructive competition. For example, a few months before parliament opened in the fall of 1879, the shares of the Cologne and Minden road were quoted at about par, while in November they stood at 141. In the same way the stock of the Rhenish railway rose from 70 odd to over 90.’

It is worthy of remark that although in taking over its railways the single State of Prussia had to obligate itself to the extent of 886,251,970 marks, or approximately \$221,562,992, there was no sensible decline in the value of Government bonds.

THE EXAMPLE OF SWITZERLAND

So carefully and so skilfully did the Swiss Confederation make its preparations for the purchase of the railways that in spite of the democratic and decentralized nature of its Government, it succeeded

¹ *The Railways, the Trusts, and the People*, p. 323, footnote.

in consummating the transfer on a basis that was at once eminently fair to both railway stockholders and the taxpaying public. This achievement is all the more creditable because of the fact that while the Prussian purchase in 1879 of nearly all the remaining private railways was merely a natural and almost inevitable outcome of a policy that had been begun a number of years before, on the other hand, the Swiss purchase voted in 1898 was a new and almost revolutionary move, as up to this time, all the railways of the country had remained in the hands of private corporations.

As was the custom in all continental countries, clauses had been incorporated into the original Swiss railway charters, providing for the repurchase of the roads by the nation at the end of 30, 45, 60, 75, 90, or 99 years. As compensation, the Government was required to give the companies, according to the date of purchase, either 25, $22\frac{1}{2}$ or 20 times the average net profits during the preceding ten years, and in no case less than the actual cost of the road. In the event that the repurchase should not be made until the ninety-ninth year, the company was to be reimbursed only to an amount equal to the probable cost of the reproduction of the road at that time. The roads were to be handed over in a thoroughly satisfactory condition, and if found necessary, a sum of money sufficient to put them in such a condition was to be deducted from the purchase price.

Carefully drawn up as these provisions were, however, they did not prove to be entirely satisfactory, and as

a consequence in 1872 a new railway law was passed, giving to the confederation the powers of regulation which the cantons had shown themselves incapable of exercising, and providing in greater detail the method to be employed in determining a purchase price whenever the Government might decide to take them over. This law attempted to establish the meaning of the two phrases, 'Cost of construction' and 'Net profits', which later proved to be such bones of contention.

As the amount of the purchase price of the roads depended largely on what items were to be included under the headings, 'Cost of construction' and 'Net profits', it will be seen that a proper determination of the meaning of these phrases was all important.

But the new provisions relating to this subject incorporated into the law of 1872 did not settle all the questions involved, and consequently another law had to be passed in 1883, regulating in even greater detail the methods of accounting to be employed by the roads. This law provided that only the actual 'cost of construction' or acquisition should be considered as assets of the roads. For example, in case one railway had been purchased by another for less than the original 'cost of construction', the Government would only be required to pay for it what the road actually cost its last owner. To prevent the roads from forcing the Government to make good their losses from foolish or unfortunate expenditures, it was decreed that after a road had been open for traffic, the cost of completion, extension, or of additional equipment should not be regarded as assets, except when such expenses had been

incurred in the carrying out of needed improvements in the interest of traffic. The cost of maintenance of way, and replacement of worn-out rolling stock, &c., was to be paid out of annual revenues, or out of special funds created for such purposes. And, lastly, any items that had been incorrectly placed in the construction account, or any amounts which, for any reason, were removable from the assets of the balance-sheets, were to be replaced from the annual surplus revenues of the roads. All these changes combined involved an elimination of over \$20,000,000 from the construction account.

The question of 'cost of construction' had been gone into in great detail in this law, because, on account of the comparatively light traffic of the roads up to this time, they would have found it to their advantage to determine their purchase price on the basis of their original cost. But as traffic became denser, as dividends increased, and as it became evident that the repurchase price would be determined on the basis of past 'net earnings', it became necessary for the Government in 1896 to enact a second accounting law for the purpose, among other things, of specifying with even greater definiteness, just what could rightfully be considered as 'net earnings'.

The railway companies hereafter were to be compelled to submit their accounts to the Bundesrath for examination and approval before even submitting them to the stockholders. Special vouchers relating to 'net profits' and the amount of capital stock outstanding were to be provided, and in order to verify them the Government

was to have access to the books of the company. To avoid confusion as to the charter provisions, accounts, and the differing conditions of tracks and equipment of the different lines, separate itemized statements were to be made by the companies for each line owned by them.

Like the law of 1883, this law also specified a number of items which were to be included or excluded from the construction and operation accounts. For instance, the construction account was not to be burdened with the cost of incorporation, with losses due to fluctuations in the market values of stocks and bonds, or with subsidies to other railway, highway, or bridge companies. Finally, the roads were not to be allowed to pay dividends to stockholders until their accounts had received the approval of the Government.

Nevertheless, in spite of all these carefully-drawn preparatory laws, when the time arrived to make the purchase the Swiss people were amazed to discover that a number of important questions remained to be dealt with. As a consequence,

‘the repurchase law of 1897,’ says Professor B. H. Meyer,¹ ‘was supplemented by resolutions of the Bundesrath in which the application of the accounting law of 1896 to particular railway properties was specifically indicated. Thus complete formulas were worked out in great detail, covering such terms as cost of construction, renewal fund, net profits, revenues from operation, operating expenses, receipts not to be included in operating revenues, expenses not to be included in operating expenses, and deduction from the repurchase price. But notwithstanding all these

¹ *Commercial Valuation of Railway Operating Property*, p. 71.

detailed legal and administrative provisions concerning the interpretation of the charter provisions and accounting laws, when repurchases were actually undertaken, recourse was had to the Supreme Court of Switzerland, which, in a series of three decisions, finally determined the points in dispute and laid down the rules of procedure.'

Among the most important decisions handed down by the Federal Supreme Court, was one in connexion with the North-Eastern Company, defining the meaning of the term, 'Original cost of construction,' which showed clearly the attitude taken in this matter by the highest tribunal in the land.

'In a preliminary discussion,' says Professor B. H. Meyer,¹ 'the court calls attention to the various meanings of the word "capital", and states that both parties are agreed that "money capital" should be considered in the controversy. In charters granted since 1872 the term "original cost of construction" was replaced by the expression "established original cost of construction of the existing arrangements". The question then is, What forms shall be used in defining the limits of the cost of construction? such cost to be used in determining a fair equivalent for a fair repurchase. The company contended that original cost of construction, in a wider sense, should include expenses incurred in the emission of shares of stock, in securing loans, and to cover losses from variations in the price of exchange on loans. This the court denied. Regarding the claim of the company that costs of organization should be regarded as a part of the original cost of construction, the court held that this depended entirely upon the particular circumstances. In so far as the expenses of organization found useful application in connection with construction, or in making the completed railway possible, they may be included in an estimate of the cost of construc-

¹ *Commercial Valuation of Railway Operating Property*, pp. 72, 73.

tion. More than that, cost of construction, the court said, must include all sacrifices (*aufwendungen*) which the owner of the railway has made in order to create and perfect the establishment. Hence, interest paid during the period of construction may be included, also, "the cost of organization, administration, as well as technical and administrative superintendence of construction." The court then proceeds to show that expenses incurred by the company, in order to liberate itself from burdensome charter provisions, or in order to secure an amendment to its charter, may be included in the cost of construction, in so far as these expenses were incurred in the interest of the railway.

'The court objects to the inclusion in the cost of construction of money expended in railways (*bahnanlagen*) which have been destroyed or abandoned. The company claimed that the established original cost of construction within the meaning of the law of 1872, meant the cost of construction not only of the existing establishment, but also of the establishments which had preceded the existing one. In other words, the company desired to take into consideration, in a cumulative manner, succeeding epochs in the life of the railway in determining the original cost of its construction. The court denied this cumulative method. Again, the North-Eastern Company claimed that original costs should include moneys expended in bridges, streets, local railways, subventions, and all *fonds perdu*. The court held that, in deciding this point, the legal ownership of the establishments, such as roads and branch railways, for which moneys had been expended, was not the decisive factor, but rather whether these establishments served in a permanent way the interests of the railway. The situs of the legal right of private property in these subsidiary establishments was held to be immaterial. It was decided that either the railway could receive compensation for these expenditures in an increased repurchase price, or the state should assume responsibility for the subventions thus made and still to be made under contract in the future. The court denied that

the cost of renewals constitutes a part of the original cost of construction, and asserted that renewals should be charged to operating expenses, and that all expenditures for extensions and for material improvements in the existing plant should be charged to capital. In connection with the improvement and strengthening of the superstructure, the court again denied the right of the company to take into consideration the cumulative effect of different epochs in the life of the railway. "The one method of calculation excludes the other," said the court. Either the existing establishment must be taken as the basis of the calculations, or the establishment which the present one has replaced.

' Among the minor points decided in the matter of the Saint Gothard Railway were the following :

' 1. Gratuities paid to officials and employees with a view of cultivating their good will and zeal, and thus increasing traffic and the efficiency of operation, may be included in operating expenses. These items, it was admitted, were in addition to regular wages and salaries ; they were voluntary ; they did not rest upon legal obligations nor upon custom of many years' standing ; they were not even necessary for the successful operation of the line. Nevertheless, the court held that the fact of these items having been paid was sufficient to warrant their inclusion in operating expenses.

' 2. The railway had established private schools, both primary and intermediate, as well as certain commercial schools, in a number of places, enumerated in the decision. It had erected schoolhouses, engaged teachers, and maintained such schools free of expense. The company realized the necessity of providing educational facilities for the children of German employees in towns where no other schools were available, in order to make the tenure of these employees more permanent and attractive. The expenses incurred for educational purposes were allowed by the court in determining the amount of the net profits, within the meaning of the charter provisions.

‘3. The railway had maintained provision houses at various stations in which employees could secure the necessaries of life at cost, and have them transferred over the railway to their place of residence free of charge. Provision houses of this kind the court did not consider necessary in the same sense that the establishment of schools was necessary ; nevertheless, the items of expense incurred for this purpose by the railway were admitted to the special balance sheet in accordance with which the repurchase price was determined.

‘4. The court denied the right of the company to include in operating expenses, presents and friendly financial aid extended to employees.’

During this preparatory period, in addition to the immensely important laws above mentioned, two minor laws of great value to railway employees were passed. The first, a law enacted December 20, 1878, provided for the establishment of sick funds and pension funds for railway employees ; and the second, enacted June 27, 1890, reduced the hours of labour of railway employees.

The deliberate and statesmanlike methods of purchase employed by Prussia and Switzerland stand out in glaring contrast not only with the unbusinesslike plan of procedure followed by Belgium, but also with the almost revolutionary impulsiveness with which Italy in 1905 inaugurated her new régime of state-managed railways. This step by Italy, for which practically no preparation had been made, and which necessarily resulted in commercial confusion and industrial complications of all sorts, should serve as a warning to us, as well as to other nations, *not to put off all preparations for such a move until by some popular upheaval of public*

opinion we suddenly find ourselves, as the Italians did, with a huge system of Government railways on our hands to be managed as best we are able. An unintelligent reactionary policy of this sort is sure to be costly, if not actually disastrous, to the entire commercial and industrial life of a country. The only really conservative policy is to prepare for and to make the best of what is seen to be inevitable.

THE PROBLEM IN THE UNITED STATES

The United States Government, when it undertakes to nationalize its railways, will find itself confronted with some special problems which European countries have not had to face. In most of our railway charters, unfortunately, there have been incorporated no clauses providing for the possibility of a future government purchase of the roads. As a result of this oversight, we shall be forced to have recourse to one of three methods—purchase by means of friendly negotiations, or purchase by the exercise of the right of ‘eminent domain’—or both. In the case of our recent acquisition of the Panama railway, the purchase finally was made by means of a regular business bargain, but before that bargain was consummated, the Government, in order to force recalcitrant stockholders to sell for a fair price, found it necessary to introduce a Bill into Congress which passed the Senate unanimously, and was favourably reported by the Interstate Commerce Committee of the House, providing for the condemnation and purchase of the road in accordance with the right of ‘eminent domain’. As at this point the

stockholders of the road decided to accept the Government's offer for their stock, further action was unnecessary, and the Bill was never brought up for final passage in the House.

This miniature purchase by our Government has had a very salutary effect. It has cleared our national atmosphere of a number of fallacious arguments against the possible future nationalization of our railways. First of all, it has established the constitutional right of our Government, not only to buy, but to own and operate railways. Secondly, it has shown the possibility, and even the advisability, under certain circumstances, of the utilization by our Government of its right of 'eminent domain': and thirdly, it is demonstrating at the present time, by the marked improvement which is taking place in the quality and quantity of the railway service offered, by the important reductions that are being made in rates, and, strangely enough, *by the greater initiative shown in every phase of the management of the road*, that even our Government is capable of effective and satisfactory railway administration.

CHAPTER VI

RESULTS OF GOVERNMENT OWNERSHIP

THE first question that people ask nowadays concerning any proposed change is, How will it work ? In this pragmatic or practical age, the only test of a theory or principle that is regarded as decisive, is the test of results. Consequently people are apt to come to a decision concerning the merits or demerits of a given system of railway ownership or administration according to the answers they get to the following questions : Does it give an adequate, rapid, and safe ¹ service ? Are the employees well disciplined, humanely treated, and well paid ? Are the prices charged for transportation high or low ? And, is the enterprise so efficiently managed as to give satisfactory financial results ?

QUANTITY AND QUALITY OF SERVICE

The history of European railways makes clear that, whenever a Government has purchased a railway from a corporation, it practically always has found it necessary to set to work at once to make important improvements in the service offered to the public ; and that, whenever, in the same country, there have existed side by side State roads and private roads, other things being

¹ As to the relative safety of travel on American corporation roads and Prussian and Belgian State roads, see chapter ix.

equal, the State roads almost invariably have given a distinctly better service than have the private lines. Take, for example, the case of Prussia. As to the quality of service offered by the Prussian State railways, there is a gratifying unanimity of opinion among railway authorities. In the words of Mr. Ernest S. Bradford :¹

‘ Improved passenger coaches are being put on, more like American cars than on other continental roads, with end-doors, wash rooms, vestibules, &c. The Prussian freight cars, always smaller than those in the United States, but larger than those in England, are being increased in size, to hold twenty and thirty tons ;² and steel cars are coming into use. Electric traction has been experimented with—a third-rail system. Westinghouse brakes, steam heat and gas lighting for passenger cars, and the adoption of a block signal system, indicate that *for European railways* the Prussian are making good progress. In 1905 there were 32,847 telephones in use in the railway service, of which 5,467 were installed during the preceding twelve months.’

In regard to Prussian railway conditions a similar statement by Mr. G. G. Huebner sums up the whole situation in a few words ; he says :³

‘ The reduction of freight rates and the growth of profits have not been at the expense of technical improvements. In the matter of size of cars and trainloads, introduction of steel cars, automatic couplings, tunnels, terminal facilities, and in many other technical matters, the railways of Prussia are inferior to those of America. At the same time, the state railroads of Prussia are making greater progress *than other railways of Europe—whether private or*

¹ *The Annals of the American Academy of Political and Social Science*, March 1907, p. 75.

² A German ton equals 2,204 pounds.

³ *The Annals of the American Academy of Political and Social Science*, March 1907, pp. 93, 94.

state. In 1904, 128,747,348 marks were expended on the increase and maintenance of rolling stock, 177,771,095 on construction and 163,603,919 on general equipment and engines. Larger engines and cars and better terminal arrangements are being introduced side by side with the reduction of rates and increased profits. Better use is being made of cars by means of telegraphic reports sent from each district to the directorate at Magdeburg, and by agreements permitting the use of foreign cars. Where traffic is very dense special depôts for particular freight are provided, instances of which are the cattle depôt and fuel depôt at Berlin, the block signal system is almost universal, as far as possible dwellings are erected by the state for employees, who must live near the railways, refrigerator cars and special fast trains are introduced for perishable goods, and, as in the United States, second, third, fourth, and even fifth tracks are being constructed to avoid congestion of traffic. As a general rule, these improvements are *first introduced by the Prussian state railway*, and then are gradually adopted by the private and other state railways of Germany.'

That Prussia has a decided advantage over us in the matter of the speed and reliability of passenger trains has been shown in a detailed comparison made some two or three years ago by Messrs. Hoff and Schwabach, the well-known German railway authorities. After giving a long table, in which the speed obtained by the fastest American and Prussian railways is compared in a most painstaking and accurate way, they sum up the situation as follows :¹

'The table shows that, comparatively speaking, the number of German trains attaining a speed of 60 km. or more was in excess of that on American lines (in all two-

¹ *North American Railroads*, pp. 60-3.

thirds), even counting in the two "fastest long distance trains in the world". The passenger traffic as far as rapid transit is concerned, was accordingly more uniformly well handled in Germany than in the United States, and that in spite of the greater local service of German fast trains . . .

'Punctuality, by the way, as will be shown later, seems to be a sore spot in American railroad traffic. In this respect no doubt American railroads are far behind the German, though we have no means of judging in how far the American system of railroading is deficient.'

In Switzerland, as soon as the railways had been nationalized, the Government proceeded at once to make a number of improvements in the road-beds, rolling stock, and stations. Many tracks were doubled, and faster and more frequent trains were introduced, while better connections were arranged between trains arriving and departing from different parts of the country. As an instance of one of the changes made in this way, I was told that when the companies owned the roads it was impossible to make the trip from Geneva to Berne and return the same day, because of the fact that the connections were so poor, that passengers had to stop for an hour or two in Lausanne both coming and going. This peculiar arrangement is said to have been caused by the fact that a good deal of the stock of this road was held by inhabitants of Lausanne, who hoped in this way to retard the growth of Geneva and build up their own city. It is hardly necessary to add that as soon as the Government took charge of the roads, the demands of justice and common decency at once were complied with, and through trains from Geneva to Berne at once were introduced.

When the Italian Government took over the management of its railways in 1905, it found itself face to face with a herculean undertaking. The road-beds, rolling stock, stations, and everything else connected with the roads, were worn out or outgrown, so that they were entirely unequal to the task of supplying the country with a satisfactory system of transportation. As a consequence, the Government has been hard at work ever since endeavouring, at an expenditure of nearly \$30,000,000 a year, to get the railways out of the disorganized and demoralized condition into which twenty years of private corporation management had plunged them. In regard to this peculiar Italian railway situation, Mr. James E. Dunning, United States Consul at Milan, in his recent report to our Government on the subject, has given some very interesting facts. Speaking of the shortcomings of the corporation régime Mr. Dunning says :¹

‘ Appropriations for new mileage and rolling stock, however, were insufficient, so that when the state took back the lines in 1905 it found on its hands, out of 2,664 locomotives, 798 more than 30 years old ; 3,077 out of 6,985 passenger coaches 30 years old ; 652 out of 1,752 baggage cars of the same age or older ; and out of 52,778 freight cars, 9,735 were more than 40 years old. . . . During the first seven months of state operation following July 1905, out of 290 locomotives in the Compartment of Naples, on the Mediterranean Line, 117 had to go into the shops for extended repairs.

‘ Assuming that an increase in freight traffic of 10 per cent and in passenger traffic of 13 per cent from 1904 to 1906

¹ Consular Report on Italian Railroads, submitted August 7, 1907, pp. 23, 24, 25, 26, 29, 30.

can be set down as one of the principal causes of the difficulties encountered by the state in reassuming control of the lines, it must be admitted that another important condition is to be found in the private management which handled the lines prior to 1905 under the contracts made in 1885 . . . The case of the 117 locomotives on the Naples division, mentioned above, was by no means singular. When the state came to overhaul the 76,517 passenger and freight cars turned over to it, in 1905, it found 7,000 of them unfit for use, and in the next eight or nine months 2,000 more, making a total of 9,000, which were retired for destruction or extensive repair. Even with every car-supply works in Italy going on full time on Government orders, and with the last degree of foreign construction, purchase and loans which could be secured on the large sums spent by the national treasury in the effort to restore the service, nearly a year had passed before much headway had been made against the condition of things existing in July 1905. At the Milan freight stations, which were probably the most acute of the several storm centres of disorganized service in Italy from July 1905 to January 1907, there were offered some striking illustrations of the true meaning of the situation.

‘ Milan has been growing rapidly for the past twenty years—for just about the period during which the private companies had control of the railroads. It was not a sudden growth, but a gradual development of known and perfectly understood industrial elements which must have been as clear to the companies as to any one else. Yet, so little provision was made by the companies to keep pace with the advancement of the metropolis, that a short time after the state took over the lines it found at one of the Milan freight stations, which had a capacity for unloading 150 cars a day, 947 cars awaiting attention ; and at another station with about the same actual capacity, 600 cars were on sidings waiting to be unloaded. . . .

‘ The government’s attack upon the problem was not

only carefully organized but intelligently and effectively carried out. More than 500 locomotives of various types were at once projected, and contracts for a large number of them were placed. One American firm took an order for twenty heavy machines. Cars of all classes were rigidly inspected and mercilessly re-classified on the basis of actual value. At the end of the first year of control, 9,000 pieces of rolling-stock were under repair, while great quantities had already been totally demolished and put out of the way. Large orders for passenger cars were given, some of the best American makes entering into these contracts. Freight cars were borrowed and hired from several other continental railroad systems. The government's effort was directed solely along the line of locating all the fairly well centralized difficulties of the case, and cutting them out with as little delay as possible. The state itself built and equipped a supply works for the manufacture of material and for repairs. In all this work, home industry was favoured up to an advance in bids of 5 per cent, over those of foreign bidders. . . .

'This report has already indicated certain obvious improvements in the service made by the state immediately after 1905, in the purchase of new rolling-stock and the repair of the old. This policy has been continued with unabated headway. New trains are now being delivered (not quite two years after the taking over of the lines), and will be in service before August 1907. They will afford an entirely new service between Milan and Rome, Milan and Naples, Milan and Venice, and Milan and Florence, while the international expresses connecting Milan with Paris, Berlin, Vienna and other great European centres are the equals of any trains anywhere in the world. This high praise is merited likewise by the handsome trains running from Milan to Rome, Naples and Venice. The government is making good its intention—which has so far never been publicly expressed, to give Italy one of the finest railroad systems in the world.'

The transportation facilities offered by the Belgian company lines from the start were distinctly inferior to those offered by the State lines. As a matter of fact, when they were not in direct competition with State lines they generally charged the same rates for a poor and inadequate service that the State lines in other parts of the country charged for the best service they could give. In this way they seriously crippled the industrial success of the sections of the country which they were constructed to serve. Again and again the *manufacturers* and *business men* of such regions felt constrained to call upon the Government to buy up the private lines of their districts, so that they might have as effective service as was enjoyed by communities which were served by the State lines.

In his report on the proposed purchase of the 'Grand Central', made June 8, 1897, for 'La Section Centrale', the Honourable M. Helleputte, a strong partisan of corporation railways, said :

'If all Belgians are equal before the law, they are not before the railways, but they have a most intense desire to become so. It is not necessary to seek any other explanation of the favour with which the public has received the rumours to the effect that most of our private railways are going to be taken over by the state. A comparison between the transportation facilities offered to the public by the private railways on the one hand, and by the state railways on the other, is altogether to the advantage of the latter. Branch lines are more numerous, better communications are established, rolling-stock is more comfortable, stations are better equipped, stops are more frequent and the speed of trains is greater. Let us add that

the employees of the corporation lines have just added their forces to the partisans of the purchase. They are not as well paid as on the state lines, except in the higher grades of employment, and they are required to do more work. They expect, therefore, as a result of the purchase, an improvement in their conditions of labour.'

RESULTS TO EMPLOYEES

As a rule one of the first results of the purchase of a railway by a Government, is an increase in the salaries of the personnel of that road, and the extension to it of such other advantages as are enjoyed by employees of other Government lines.

It is a very easy matter for the opponents of Government ownership of railways to make comparisons of wages and hours of labour of the German, Swiss, Italian, and Belgian railway employees with those of private roads of America, which make a very unsatisfactory showing for Government railways. Such comparisons, however, are not at all fair, as wages are much higher in America than in the countries above named for *all categories of labour*. Manifestly, the one fair comparison in this matter is that between the wages, hours of labour, and general conditions of employment of the employees of the State railways of European countries with the employees of the corporation railways of those same countries.

The employees of the State railways of Prussia as a body are the best disciplined and best organized set of railway employees in the world. While their salaries would be considered small in comparison with those of American railway workers, not only the salaries, but

the general conditions of labour are more satisfactory on their Government lines than on their private lines. The State management has built for its employees a large number of model dwelling-houses which are rented to them at a very reasonable figure. In 1899, 30,840 such dwellings had been erected out of the funds at the disposal of the Government, and in 1905 this number had been increased to 40,800. Moreover, it is not a small matter to the Government workers employed, that on the Prussian railways the danger involved in their daily labour is not more than one-fifth as great as it would be on American railways. These few facts indicate that while the Prussian railway management does not levy a tax on the travelling and shipping public, in order to pay exorbitantly high wages to its corps of railway employees, at the same time it has endeavoured to be humane, and to pay wages that are slightly above the general wage level of the country. It is entirely possible that more might be done for the employees of State railways in the different countries of the world than is being done, but the fact must be recognized that while the Government should be a model employer, at the same time, there is little reason for expecting the Government to single out *its* employees from the great mass of workers, and to make of them a privileged corps whose favoured position is maintained at the expense of the rest of the tax-payers—poor as well as rich.

In Switzerland, the personnel of the roads profited very considerably by the transfer of the railways from private to public hands. A law was passed December 19,

1902, reducing the time limit of labour from twelve to eleven hours a day, and guaranteeing to all employees fifty-two days of rest a year, as well as vacations ranging from one to three weeks, according to the number of years of their service. Moreover wages were increased slightly, and as an act of pure generosity to the worst paid, and hence most needy men in the service, a pension of \$9 a month has been allowed to all day labourers and other employees having completed fifteen years of service, who for any reason are barred from the benefits of the other pension funds:

In Italy, during the entire period of private enterprise in railway management, the companies and their employees were in a constant state of friction, bordering on a state of industrial war. It was on account of the crisis brought about by this condition of affairs that the Italian Government suddenly decided on April 17, 1905, to undertake the management of its railways. Impelled by the ceaseless demands of their men, the Government had been struggling feebly and ineffectually during the entire lifetime of the companies to make them live up to their original agreements as to the treatment of their employees. This endless three-cornered controversy reached such an acute stage in 1902 that the Government, which did not care to take a decisive stand against the companies, and did not dare to face the threatened tying up of the railways, and through them of the industrial life of the country by a strike on the part of the men, settled the matter temporarily by compromising with the unions, and itself assuming the financial responsibilities which the com-

panies had refused to shoulder. Naturally, such an illogical and cowardly solution could only postpone the final day of reckoning. That day was scheduled to arrive, and did arrive, on April 17, 1905, at the precise moment when the Government and the companies were endeavouring to give another twenty years' lease of life to the baleful old régime of private management of State-owned roads. The men again struck, and set the whole country in a turmoil, and as a consequence, such an irresistible public sentiment in favour of Government ownership manifested itself, that, contrary to the theoretical economic principles of the Government, the Chamber of Deputies was forced to come to a hasty decision in favour of a new régime of State railway management.

The new Government management has raised the salaries of the employees between 10 per cent and 14 per cent, has reduced the hours of labour, and in every possible way tried to establish satisfactory relations with them. But at the same time, in order to prevent any demoralization of the service by means of strikes, both the law of 1905 and that of 1907 have contained provisions making of all railway employees 'public officials'. As in Italy a strike on the part of 'public officials' is a criminal offence, this provision placed in the hands of the Government a new and powerful weapon for the prevention of these industrial conflicts. Moreover, another provision in the latter law (Art. 56), which has the same object in view, provides that all strikers shall be considered as having resigned from the service and their places at once shall be filled by new men.

That the new management could satisfy all the demands of its workmen at the start, was not to be expected, but that it has accomplished some very encouraging results with the meagre means at its disposal, and during the brief period of time that the roads have been in its hands, is made evident by the support given to it, during a recent strike, by Italian public opinion, which almost always in the past has sided with the strikers.

In Belgium not only do State railway employees enjoy shorter hours of labour and higher wages than do the employees of the private lines, but they have also a great many advantages in the way of sick leave, accident insurance, old age pensions, and pensions for their wives and children in case of death, which are not enjoyed at all or are not enjoyed to the same extent by the employees of the companies. Moreover, they have clubhouses, where, surrounded by every comfort, and at small expense, they can eat, loaf, and sleep when away from home. Night schools are formed for them, and every inducement is given to encourage the younger men in the service to prepare themselves to rise to the highest rank which their natural abilities will permit them to attain. Every employee of the State system also is allowed sufficient time on Sunday to attend church services, and is likewise allowed a holiday, without loss of salary : first, in order to participate at target practice, or to perform any of his other duties in connection with the militia ; secondly, in order to vote or fulfil his other civic duties ; thirdly, in the event of a marriage, the birth of a child, the first communion of

a child, or in the event of being called upon to act as a godfather or to attend a funeral of near relatives, &c., &c. In other words, so far as possible, the Belgian Government recognizes that its railway employees are human beings, and endeavours in every way to enable them, without financial loss on their part, to fulfil all their duties as such. It believes that by establishing a relationship between it and its employees on a basis of humanity, rather than of mere dollars and cents, both it and they will be benefited.

CHAPTER VII

RESULTS OF GOVERNMENT OWNERSHIP (*continued*)

RATES

UNDOUBTEDLY, the question which interests the general public most is that of rates. This is not the most important question connected with the railway problem, but it is the one which touches the public most immediately. Any comparison of railway rates between different countries however must necessarily be more or less unscientific, owing to the varying conditions under which their lines are run, and the different rate schedules which are employed. But while no entirely satisfactory comparison of the rates of one country with those of another has been or can be made, at the same time, comparisons can be instituted which will prove of very great practical value as making clear certain highly important facts. The most difficult attempt of this sort upon which one can embark is that of making a comparison between the rates of American railways and those of European countries. Take, for example, the case of Prussia. It is extremely difficult to make any comparison between the rates on her state roads and those on our corporation roads because, first, the general scale of wages is distinctly higher in America than in Germany ;

secondly, the length of haul for freight in this country is 242 miles, whereas in Prussia it is only $71\frac{1}{2}$ miles, causing the terminal expenses to constitute a much larger per cent of the expense of transportation in Prussia than they do with us ; thirdly, most of the heavy and bulky freight materials, such as ores, minerals, fertilizers, timber, &c., in Prussia are carried by water, while with us they are generally carried by rail. Moreover, the cream of the American freight, that part which pays the highest rate, is carried at exorbitant rates by our express companies, whereas in Germany it is counted as freight, and helps to raise the general average of the price for carrying a ton of freight a mile ; fourthly, in America large quantities of freight are carried for the companies themselves for which no charge is made, whereas in Germany every ton so carried is actually paid for ; fifthly, the German roads carry an immense quantity of mail including parcels, for which they get no pay, while the American roads receive very high pay for every ounce of mail carried by them.

Messrs. Hoff and Schwabach, the Prussian commissioners sent to this country a few years ago to study and report on the American railway system, made a careful effort to take into account all of these diverse factors, in their comparison instituted between our rates and those of the Prussian State lines. The conclusion which they arrived at, after making allowances for all the factors which have tended to reduce the average price for carrying a ton of freight a mile in this country, was that, *under similar conditions*, the average rate in America would be 1.44 cents per ton per

mile, while on the Prussian state railways it would be only 0·95 of a cent. In the course of their interesting and valuable discussion of this subject, they say :¹

‘ American freight rates are divided into very many grades : they consequently reach and sometimes fall below the level of the German standard rates for long distances : that is to say, *for the distances which with us do not come into question* for the bulk of the traffic. However, as with us the bulk of the freight movement takes place within distances which, according to American ideas, must be called short, the natural consequence of geographical and economic conditions, it is permissible to say that the goods transported in standard classes, which amount with us to about 35 per cent of the total freight, *enjoy in Prussia-Hesse and nearly throughout Germany a lower freight rate than the goods forwarded in America according to the standard classes in force in that country.* (The average distance of transportation of all freight amounts with us to 115 kilometres (or 71·5 miles), in America to 390 kilometres (or 242·33 miles). . . .

‘ If the freight rates for articles in bulk are to be compared with any pretence to correctness, it stands to reason that it is necessary to come down to the distances over which goods are actually transported in Germany, and then the aspect is not unfavourable to our conditions after all.’²

The Honourable Charles A. Prouty, of the Interstate Commerce Commission, some time ago³ made an interesting comparison of rates from his home town, Newport, Vermont, to Boston, with rates for the same distance in Iowa, where, owing to the activity of their State Railway Commission, rates are low for this country,

¹ *American Railroads*, pp. 271-2.

² *Ibid.* p. 276.

³ Address before Massachusetts State Board of Trade, Hotel Vendôme, Boston, February 27, 1906.

138 RESULTS OF GOVERNMENT OWNERSHIP

and with rates for a similar haul in Prussia, where the rates are lower still.

RATES IN CENTS PER 100 LB.

	<i>Newport, Vt., to Boston.</i>	<i>Iowa rate for same distance.</i>	<i>German rate.</i>
Potatoes.	19	12½	9.6
Hay	17	11	10½
Butter	46	26	36
Sugar	19	17.1	10.9
Lumber	10⅔	9½	6.4
Fertilizers	17	9½	8

Commissioner Prouty further says :

‘Last summer a company in which I was interested had occasion to transport considerable quantities of copper wire from Phillipsdale, R.I., to Bradford, Vt., and of dynamos and transformers from Pittsfield, Mass., to the same destination. We paid in less than earloads from Phillipsdale 32 cents per hundred pounds, and from Pittsfield 45 cents per hundred pounds. The corresponding rates in Prussia are 11.08 and 15 cents.’

In the most recent and perhaps most authoritative comparison of Prussian and American railway rates that has yet appeared, Prof. Henry C. Adams, statistician of the Interstate Commerce Commission, after giving a number of exhaustive tables of rates in both countries says :¹

‘Quite a number of distinct impressions are derived from a study of the above tables. In the first place it is observed that the Prussian rates are much more regular and uniform than American rates, thus showing that they are not exposed to the influence of temporary changes of com-

¹ *Digest of Hearings before the U.S. Senate Committee*, Document No. 244, Part II, Appendix 9, p. 24.

mercial conditions or to the passing demands of shippers or localities. The degree of uniformity disclosed indicates that commercial conditions in Prussia are supposed to adjust themselves to railway tariffs rather than railway tariffs to industrial conditions, except it be that the industrial conditions which call for a departure from the rule of uniformity are of a permanent character. Which of these two policies is preferable, and whether stability of railway tariffs or what railway advocates in this country call elasticity of railway tariffs is preferable, is again a question of judgment, and for this reason is excluded from further consideration. A second impression left by a study of the above tables is that *for a distance not exceeding the average haul on Prussian railways the Prussian rates are lower than the American rates*, but that for long hauls the American rates are lower than the Prussian rates.'

A less complex and fairer comparison could be made between the rates of the Prussian State roads and those of the corporation roads of some other European country, such as England or France. In fact in 1902, such a comparison of the freight rates of Prussia and Great Britain was made by a British 'select committee'. The conclusion arrived at by the committee was that the 'cost of transportation on the German railways, as concerns the Levant and East African tariffs, is only $\frac{1}{3}$ to $\frac{1}{5}$ as high for a large number of commodities as the British rate'.¹

Thus it becomes apparent that Prussian State railway rates, taking everything into consideration, are better adapted to the commercial and industrial needs of the country through which they run, and on the whole are

¹ *Annals of the American Academy of Political and Social Science*, November 1904, p. 107.

more satisfactory to the travelling and shipping public, for which they are made, than are the rates of our corporation roads.

SWISS RATES

Any comparison of Swiss rates with the rates in other European countries or in America would be unsatisfactory and confusing, as the conditions of railroading in this little Alpine republic are so entirely special to it. The only comparison that can give any clear idea of the results obtained is a comparison of Swiss rates under Government ownership with Swiss rates under private ownership.

Since the purchase of the railways by the Government a very appreciable reduction has been effected on three of the four great lines of railways on round-trip passenger tickets—a reduction of from 12 to 20 per cent. Moreover, owing to the democratic instincts of even the well-to-do classes, the great comfort to be found in the second-class cars and the short distances to be travelled in Switzerland, it was found that the first-class cars were being used very little—so little in fact as to prove a losing venture. The Government therefore abolished them, except for international trains. On the other hand, the third-class cars in which the great mass of the common people ride, and from which most of the profits of the passenger department come, are being gradually improved, the latest models, built by the Government itself, being remarkable combinations of convenience, simplicity, and comfort.

Moreover, while on the French P. L. M. lines a first-class round-trip ticket costs 50 per cent more, and a second- and third-class one 60 per cent more than a ticket one way, on the Swiss railways a first-class round-trip ticket costs 50 per cent more, a second-class ticket 37 per cent more, and a third-class one only 25 per cent more than a ticket one way. Thus the French private lines give the greatest reduction to the rich, while the Swiss Government lines give the greatest reduction to those who are least able to pay. But in addition to all this, a number of Swiss *abonnement* tickets have been introduced, which are good for two weeks', a month's, or six weeks' continuous travel for individuals or families on all the great railways and steamer lines throughout the country. For instance, an individual third-class ticket good for a month costs \$12, or, good for two weeks, costs \$8. The prices of these tickets may seem absurdly low, but to the amazement of their critics they have so stimulated travel as to prove a paying venture to the railways. Largely as a result of the various reforms of this nature inaugurated, passenger traffic for the year 1904 showed an increase of 12 per cent over that for the year 1903, or an increase in the number of passengers, from 48½ millions to 54½ millions, and for the year 1905 an increase of between 9 and 10 per cent, or an increase in the number of passengers from 54½ millions to 59 millions. Moreover, in spite of the marked reductions in passenger rates, the receipts from the passenger department for the year 1904 showed an increase of over three hundred thousand dollars, and for the year

142 RESULTS OF GOVERNMENT OWNERSHIP

1905 a still further increase of over half a million dollars.

On freight rates as well, very considerable reductions have been made, averaging a little over 10 per cent on three of the four great railway lines. These reductions are the result of the extension to the other lines of the lowest existing scale of rates—that of the 'North-East' Company. The table on p. 143 will give a detailed idea of the nature of this reform.

ITALIAN RATES

The new Italian State railway management made a sweeping reduction in passenger rates on November 1, 1906. The following table will give an idea of the nature of this reduction:

Km.	Old Rates, in Lire.			New Rates, in Lire.		
	1st Class	2nd Class	3rd Class	1st Class	2nd Class	3rd Class
150	19·15	13·40	8·70	19·15	13·40	8·70
250	31·90	22·35	14·50	29	20·30	13·05
350	44·70	31·30	20·30	38	26·30	17·05
450	57·45	40·20	26·10	46	31·30	20·05
550	70·20	49·15	31·90	53	35·30	22·55
650	82·95	58·10	37·70	59	38·30	24·55
750	95·70	67	43·50	63	41·30	26·55
850	108·50	75·95	49·30	66·50	43·80	28·05
950	121·25	84·90	55·10	69·50	45·80	29·30
1,050	134	93·80	60·90	72·50	47·80	30·55
1,150	146·75	102·75	66·70	75·50	49·80	31·80
1,250	159·50	111·65	72·50	78·50	51·80	33·05
1,350	172·30	120·60	78·30	81·50	53·80	34·30
1,450	185·05	129·55	84·10	84·50	55·80	35·55
1,550	197·80	138·45	89·90	87·50	57·80	36·80

It is a singular fact that according to this new schedule a traveller cannot pay more than 87·50 lire or \$17·33 for any sort of a continuous railway journey in Italy.

¹ *Corriere della Sera*, October 31, 1906, by Ing. Filippo Tajani.

RESULTS OF GOVERNMENT OWNERSHIP 143

TABLE COMPARING FORMER FREIGHT RATES OF THE CENTRAL SWISS UNION AND JURA-SIMPLON RAILROADS WITH PRESENT ONES, ON SEVERAL OF THE PRINCIPAL ARTICLES OF COMMERCE.

Kinds of Merchandise.	Tariffs.	Distances in Kilometres.	RATES.			
			In centimes for 100 kilograms by carload of at least 10,000 kilograms.			
			Former.	Present.	Reduction.	Per cent. Reduction.
WINE . .	Class B of general tariff	5	14	13	1	7.1
		30	49	43	4	8.1
		70	103	92	11	10.6
		120	165	147	18	10.9
		250	328	290	38	11.5
		400	515	455	60	11.6
		500	640	565	75	11.7
COTTON . .	Tariff I B of general Tariff	5	11	10	1	9.0
		30	37	32	5	13.5
		70	77	66	11	14.2
		120	124	106	18	14.5
		250	248	210	38	15.3
		400	390	330	60	15.3
		500	485	410	75	15.4
BAR IRON . MANUFACTURED IRON	Tariff Special II B of general Tariff	5	10	10	0	0
		30	32	29	3	9.3
		70	66	59	7	10.6
		120	106	94	12	11.3
		250	210	185	25	11.9
		400	330	290	35	10.6
		500	410	360	50	12.1
CORD WOOD	Exceptional Tariff No. 18 for wood Series 2	5	9	8	1	11.1
		30	21	20	1	4.7
		70	40	37	3	7.5
		120	61	56	5	8.1
		250	115	105	10	8.6
		400	178	162	16	8.9
		500	220	200	20	9.0
MINERALS, PIG IRON	Tariff Special III B of general Tariff	5	9	9	0	0
		30	23	21	2	8.6
		70	45	40	5	11.1
		120	70	61	9	12.8
		250	135	115	20	14.8
		400	210	178	32	15.2
		500	260	220	40	15.3

For all tickets from one point to another in the country, whatever the distance may be, the price is the same for distances of 1,550 kilometres (963 miles) and over. As will be seen in the above table, for first-class the cost of such a trip is 87·50 lire, or \$17·33, and for third-class is 36·80 lire, or a little over \$7·00. As in Switzerland, individual tickets bearing the photograph of the holder and entitling him to travel at will during the specified time limit, are issued at still lower rates.

The Italian State railway management set to work very soon after the purchase of the roads to work out some satisfactory revision of its freight rates. In accordance with this plan not only has a special commission been appointed to undertake the work of rate revision and simplification, but also a law was passed July 7, 1907, establishing a board or committee similar to that which exists in connexion with the Prussian railways, where representatives of shippers of all classes, as well as of all the Chambers of Commerce of the kingdom meet on an equal footing with railway officials and discuss the kind of service needed and all questions affecting rates.

FRENCH STATE RAILWAY RATES

The French State railway, in spite of its unfavourable beginning and the repeated betrayal of its interests by successive Governments, and in spite of the further fact that it ran through a region industrially very undeveloped, nevertheless has prospered and grown, and in some important respects, at least, has made of itself

an example which the other railways of France are finding themselves forced to imitate.

In the words of Professor Berthelemy,

‘From a commercial point of view, the State line, where free in the matter of rate making, has made some important reductions, without diminishing its net receipts. The rates on the State road are all lower than those of the private companies.’¹

As to passenger rates : in 1885, the average rate in francs per kilometre for each passenger was 0·0466 for the Companies, and only 0·036 for the State ; and in 1900 was 0·038 for the Companies, and 0·0299 for the State. This difference is clearly a result of better management—a management which, contrary to the expectations of liberal economists, has shown itself more ready to make innovations than has been that of the corporation roads. One of the most important of these innovations, the lowering of rates, not only has benefited the travelling and shipping public, but by increasing the traffic of the road, has increased its income. It was the State road which inaugurated the system of selling return trip tickets from every station to every other station on its lines. The reduction thus made was 30 per cent and 10 per cent more for each 20 kilometres, until a maximum of 40 per cent was reached. The companies have been forced by public opinion to follow suit, but they have done it slowly and grudgingly ; and up to the present time, have made reductions on round-trip tickets of only 25 per cent first-class, and 20 per cent for the second and third

¹ *Rapport*, by M. Marcel Regnier, 1906, p. 14.

classes. The State line also was the first to put third-class passenger cars on its express trains ; and was the first to have its third-class passenger cars heated. Moreover, on the State lines, the rates for working-men's season tickets are lower than on the company roads.

In its efforts to arrange a satisfactory freight schedule the French line has been seriously hampered by the restrictive provisions placed in the contracts made by the Government with the corporation lines in 1883. 'On the State line,' says M. Regnier,¹ 'in accordance with these contracts, the freight rates for traffic to or from Paris, cannot be made lower than those of the Orleans road.' Moreover, the fact that the State line runs through a very sparsely settled and industrially undeveloped region, has tended to make it impossible to make up for the losses incident to a lowering of rates by the consequent increase in traffic. Furthermore, the amount of heavy materials, such as coal, iron, &c., which are carried at low rates, constitutes a much smaller percentage of the total traffic on the State line than on any of the other French lines.

For these and other reasons it has not been possible for the State line to take the lead in the matter of freight rate reductions as unmistakably as it did in that of passenger rate reductions. The following table gives a comparison of the average freight rates per ton-kilometre on the State line, with those on corporation lines : ²

¹ *Rapport, &c.*, by M. Regnier, 1906, p. 14.

² *Rapport, &c.*, by M. Chapuis, 1902, p. 41.

	<i>Average freight receipts per ton-kilometre.</i>	<i>Average length of haul per ton.</i>	<i>Percentage of heavy substances (coal, coke, iron, castings, building materials).</i>
	<i>Centimes.</i>	<i>Kilometres.</i>	<i>Per cent.</i>
Northern	4.04	104.5	67.02
Eastern	4.63	117.3	51.74
Western	5.44	117.4	37.82
Orleans	5.08	171.0	52.21
Paris-Lyons-Mediterranean .	4.58	198.2	41.43
Southern	4.91	140.8	33.54
Average	4.66	136.1	49.48
State	5.26	112.5	32.45

A more detailed and probably a fairer comparison of the freight rates of the State line with those of the corporation lines is to be found in the following table, showing six series of general freight rates, on all the great French lines of railway, for distances of 100, 200, 300, and 400 kilometres :¹

1ST SERIES

<i>Distances</i>	<i>100 km.</i>	<i>200 km.</i>	<i>300 km.</i>	<i>400 km.</i>
	<i>fr. c.</i>	<i>fr. c.</i>	<i>fr. c.</i>	<i>fr. c.</i>
State	15	28	39	52
Western	16	31	46	60
Orleans	16	31	46	60
Southern	16	32	48	63.50
Eastern	16	31	46	60
Lyons	16	31	46	60
Northern	16	31	46	

2ND SERIES

State	13	24	33	44
Western	14	27	40	52
Orleans	14	27	40	52
Southern	14	28	42	55
Eastern	14	27	40	52
Lyons	14	27	40	52
Northern	14	27	39	

¹ *Rapport, &c.*, by M. Chapuis, 1902, p. 40.

3RD SERIES

<i>Distances</i>	100 km.	200 km.	300 km.	400 km.
	<i>fr. c.</i>	<i>fr. c.</i>	<i>fr. c.</i>	<i>fr. c.</i>
State	11·50	21	30	40
Western	12	23	34	44
Orleans	12	23	34	44
Southern	13	26	38·50	50
Eastern	11	21	31	40
Lyons	12	23	34	44
Northern	12	23	33	

4TH SERIES

State	9·50	17	24	32
Western	10	19	28	36
Orleans	10	19	28	36
Southern	12	24	35	44
Eastern	10	19	28	36
Lyons	10	19	28	36
Northern	10	19	27	

5TH SERIES

State	6	11	15	20
Western	8	15	22	28
Orleans	8	15	22	28
Southern	10	19	26·50	33
Eastern	8	15·50	19·50	23·50
Lyons	8	15·50	19·50	23·50
Northern	8	15	21	

6TH SERIES

State	5	9	12	16
Western	5	8·50	12	15
Orleans	5	8·50	12	15
Southern	5	8·50	12	15
Eastern	5	8·50	12	15
Lyons	5	8·50	12	15
Northern	4	8·50	12	

This table shows that the general freight rates of the French state line are lower than those of the corporation lines except in the case of the sixth series.

During the discussion of the Bill providing for the purchase of the 'Western' road its opponents laid great stress on the point that this purchase would involve the extension of *the lower rates then in force on*

the State line to the 'Western' road, thus causing a diminution of receipts on that road amounting to about \$3,000,000 a year on freight alone. M. Charles Prevet, Rapporteur for the Senate Committee, to whom the Bill was referred, and a strong adversary of the Bill, said :¹

'As for freight rates (on the State line), if one had to confine himself to the average receipts per ton-kilometre (State line, 5.14 centimes and company lines 4.59 centimes) one would be forced to conclude that as a whole they are higher. We repeat that this standard is of doubtful value, and we content ourselves with admitting that they are not noticeably lower. Nevertheless, there are indeed some which must be lower than those of the Western Company, since the Minister of Public Works, in his note of January 28, 1907, estimates that the unification of the two systems will entail a loss of about 15,000,000 francs (\$3,000,000) in freight receipts.'

BELGIAN STATE RAILWAY RATES

In Belgium the State lines have always been the first to lower rates. One reason that Belgium has exercised so little detailed control over the rates and service of company lines is that a clause was incorporated into most of the 'cahiers des charges' to the effect that all reductions brought about in the rates charged by the State roads must at once be rendered operative on the company roads as well.² It is true that in one way the private competitors of the State lines did set the pace, and that was in the matter of discrimination. While to small shippers they always charged as high rates as

¹ No. 121, Sénat, 1907, *Rapport, &c.*, by M. Charles Prevet, p. 98.

² *Documents relatifs à la Concession et l'exploitation des lignes, &c.*, 1897, vol. i, p. A-36.

did the State, to large shippers they made a practice of giving special rates, and thus not only succeeded in taking from the State lines the traffic which rightly belonged to them, but also in working the greatest kind of injustice to the small shippers, who, on account of these discriminations against them, were unable to compete successfully with the large and favoured concerns. These small shippers who were being discriminated against, like those in regions where no State lines existed, were loud in their demands that the Government buy out the companies, so that every shipper, small as well as large, could have a 'square deal' in the matter of railway transportation. Of this 'illicit competition' as it was called by the Honourable M. Renkin, one of the ablest Belgian partisans of private railways, the Honourable M. Bertrand said :

'The Grand Central line each year gets hold of millions of tons of freight which ought to go by the state lines. But how does the Grand Central go about it thus to compete with the state railways? It is very simple. It has special agents who go to the great manufacturers and directors of coal mines of Charleroi, the great merchants and ship-owners of Antwerp, and say to them, "I have my regular authorized freight rates and cannot carry freight at any lower price, but if you will give me your freight I will give you a rebate." It is thus by fraud that one takes from the state these large quantities of freight. Is this legal? . . .

'In fact the government has known for a good many years, from reports made by its agents, that the Grand Central acts in this dishonest way. During a number of years—I do not know whether or not it is done to-day—the Grand Central has had stationed permanently at the Antwerp Stock Exchange, one of its agents, who was there

for the purpose of thus getting hold of as much freight as possible for the company. The state was not ignorant of this fact, for it found it necessary, during a long period, to send one of its own commercial agents to the Antwerp Stock Exchange to bargain and connive in competition with the agent of the Grand Central.' ¹

COMPARISON OF BELGIAN STATE SYSTEM WITH FRENCH NORTHERN LINE

While for more than a quarter of a century it has been generally recognized by the leading railway authorities of Europe and America, that Belgian rates both for passengers and freight are the lowest in any country in the world with the exception of India,² at the same time it has been contended by many authorities who are theoretically opposed to Government ownership, that the Belgian system is far from being as efficiently, economically, and on the whole as satisfactorily managed, as it would be were it in the hands of a well-equipped, up-to-date corporation. In view of this contention, it will not be without interest to make a somewhat detailed comparison of the Belgian State railways with some private line, as nearly like it as can be found in extent, cost of construction, and general conditions of service.³ While the Belgian system of State railways is neither the most public-spirited nor the most businesslike example to be found in Europe, of a publicly owned and managed railway, yet a very interesting and instructive comparison can

¹ Chambre des Représentants, June 15, 1897.

² See *Railroad Transportation*, A. T. Hadley, p. 216.

³ It is only fair to say that the lower wage scale prevailing in Belgium gives to the Belgian roads an economic advantage.

be instituted between it and the line which is universally recognized as being far and away the best and most economically managed line of private railway on the Continent, i. e. the French Northern. If the Belgian system does not reveal a distinct economic inferiority, when placed side by side with this consummate achievement of continental high finance in railway management, then must Government ownership of railways stand vindicated on what has always been considered by both friends and foes to be its weakest side—the side of economic efficiency.

Of all the railways of Europe, these are the two the general conditions of which are most nearly alike. First, they are about the same length—3,765 kilometres and 4,047 kilometres, respectively, in 1905. Secondly, they traverse regions having the same general characteristics, although the operation of the Belgian system, because of the extraordinary multiplicity of its branch lines and the greater frequency of the stops its trains must make, is necessarily more costly than that of the French company. To convince oneself of this it is only necessary to compare the figures quoted by M. Renkin in his report for 1901,¹ on the budget of the Belgian state railways. The average distance travelled by passengers in 1895 was 28 kilometres on the Northern and only 22 kilometres on the Belgian state lines : and the average distance for which a ton of freight was carried was 105 kilometres on the Northern, and only $76\frac{7}{10}$ kilometres on the Belgian state roads. As a consequence of this, the Belgian state roads required

¹ Report for 'La Section Centrale', 1901, p. 28.

66 $\frac{2}{10}$ locomotives for each 100 kilometres of railway, whereas the Northern required only 45 $\frac{9}{100}$, and whereas 13 $\frac{7}{10}$ employees were necessary for the Belgian state roads per kilometre of line, only 10 $\frac{31}{100}$ were required by the Northern. Practically, this same condition of affairs has continued ever since.

In spite of these slight differences, however, as has been said, the results of the operation of these two lines of road probably are more fairly comparable than those of any two lines in Europe.

The following tables¹ give the average statistics for the five years from 1901 to 1905 inclusive :

	<i>Northern.</i>	<i>Belgian State Line.</i>
Passenger, kilometres travelled	2,173,500,000	2,966,600,000
Ton-kilometres	3,405,079,805	3,366,842,484

BY KILOMETRES OPERATED

	<i>Northern.</i>	<i>Belgian State Line.</i>
Receipts	63,969 francs	55,801 francs
Operating expenses	34,663 „	34,994 „
Net Product	29,306 „	20,807 „
Financial charges	21,566 „	19,442 „
Net Profits	7,740 „	1,365 „

The French Northern road then, during the period between 1901 and 1905, yielded a net profit of 6,375 francs more per kilometre than did the Belgian system. How can this difference in favour of the corporation road be explained? Is it due to the economic inferiority of State management?

On a careful examination of these tables of figures,

¹ Quoted in a course of lectures on railway economics at the 'Université Libre' of Brussels, by M. F. Vanderrydt, chief engineer of material and traction of the Belgian state railways.

we find that this difference in net profits was caused by an even greater difference in the gross receipts of the two roads. Although the Northern road carried not nearly as many passengers and very little more freight than the Belgian system, it nevertheless received 63,969 francs per kilometre in gross receipts, whereas the Belgian state system received only 55,801 francs—a difference of 8,168 francs per kilometre. Moreover, a further study of the comparative rates of the two roads reveals the interesting fact, which indeed is the key to the whole situation, that this difference in ‘gross receipts’ was caused by the difference in their rates. Following are the exact figures—the average rate per passenger per kilometre travelled during the period under consideration (1901–5), was 3·55 centimes for the French Northern, whereas it was only 2·45 centimes for the Belgian state system.¹

The only other ton-kilometre statistics for the Belgian roads which I have been able to find in Government publications, or in other reliable sources of information, appeared in the report of M. Renkin, in behalf of the ‘Section Centrale’ for the year 1901.² M. Renkin is an able and a bitter adversary of State management of railways, and in this report made a comparison of the results obtained by the Belgian railways with those obtained by the French Northern for the two years 1895 and 1899. For both these years the Belgian rates were lower than the ‘Northern’, but as in 1899 the

¹ These figures concerning the ton-kilometre rate from 1901 to 1905 on the Belgian lines, I owe to the courtesy of a Belgian railway official, who took great pains to make as accurate a calculation as possible.

² Report for ‘La Section Centrale’, 1901, p. 28.

financial condition of the Belgian roads was entirely abnormal, as the result of the purchase in 1897 of the Grand Central and several other private railways by the Government, his comparison for that year is of slight value. As no such objection can be raised to the year 1895, let us make a careful analysis of M. Renkin's comparisons for that year. He says :¹

'The net profits of the French Northern were 25,255,928 francs, while for the Belgian system it was only 7,581,846 francs.'

These strikingly different results are the more to be remarked, he observes, as the financial charges of the French Northern are much heavier than those of the Belgian system. In fact, he shows that

'in 1895 the French Northern paid out as interest, and toward the liquidation of an indebtedness of 1,391,000,000 francs, approximately, 71,912,297 francs, whereas the Belgian system paid out only 51,146,000 francs, as interest and toward the liquidation of its indebtedness of 1,413,000,000 francs. Thus the Belgian State system paid out in financial charges 20,750,000 francs less than the French Northern.'

Thus, *according to his calculations*, the superiority of the management of the 'Northern' is shown not only by the difference in net profits, or a difference of about 17,674,000 francs, but by this amount plus the 20,750,000 francs difference in their yearly financial charges—amounting in all, therefore, to 38,500,000 francs in round numbers. On considering this statement of the case by M. Renkin, the questions at once present themselves : Can this be true ? and if so, Is his assumption

¹ Report for 'La Section Centrale', 1901, p. 29.

correct that it is the result of the economic superiority of ' private enterprise ' ?

On a close analysis of his figures, it at once becomes apparent : first, that this difference of 38,500,000 francs in favour of the corporation road is the result of an even greater difference, amounting to 45,800,000 francs, in the gross receipts of the roads. As the traffic of the Northern is only slightly heavier than that of the Belgian lines, it follows that most of this excess in gross receipts is caused by the higher rates of the corporation road.

A continued study of M. Renkin's figures reveals the fact that several millions of the 20,750,000 francs of excess paid out in financial charges by the Northern is a sign, not of economic superiority, but of economic inferiority. As M. Renkin himself explains on the next page of his report—whereas the Belgian system paid out in 1895, toward the liquidation of its bonded indebtedness, 4,909,000 francs, the Northern paid out 13,126,000 francs or an excess of only 8,217,000 francs. The difference between this amount and the 20,750,000 francs boasted of by M. Renkin, evidently consists of money expended because of the higher rate of interest paid by the Northern on its bonded indebtedness.

Thus, the actual financial advantage manifested by the Northern in 1895 can be obtained by adding the excess of profit by the French Northern over the Belgian State system to the excess of money paid toward the liquidation of its indebtedness. This forms a total not of 38,500,000 francs, but of 25,891,000 francs. But it is not enough to have reduced to its true proportions

this financial balance in favour of the Northern road, that balance must be accounted for; we must find out its cause.

That the determining factor in the case is the higher scale of rates charged by the corporation road, is made clear by a careful scrutiny of M. Renkin's figures for the year 1895. The rate per passenger-kilometre on the Northern was 3.58 centimes, whereas on the Belgian system it was only 3.09 centimes, and the rate per ton-kilometre for freight on the Northern was 4.43 centimes, whereas on the Belgian system it was only 3.78 centimes. If the Belgian State system had charged the rates of the Northern company, its gross receipts would have been augmented by 8,064,000 francs for its 1,645,789,613 passenger-kilometres travelled, and by 14,818,000 francs for its 2,279,796,441 ton-kilometres of freight carried, this combined difference amounting to 22,883,000 francs. When subtracted from the 25,891,000 francs excess of the Northern, it would leave a difference of only about 2,692,000 francs to its advantage, or about a half million dollars, which is very easily accounted for, and is a very different affair from the 7,500,000 dollars which M. Renkin pointed to so triumphantly, as evidence of the economic superiority of private enterprise. But even this half million dollars cannot be left to the credit of the Northern. Up to 1895 this company had received from the nation and the 'localities' through which it runs, financial aid to the amount of about 100,000,000 francs, or approximately \$20,000,000. With interest at 4 per cent, this immense subsidy would cause a yearly saving to the

company of \$800,000. It thus follows that its half million dollars of supposed advantage over the Belgian state lines, *together with an additional* \$300,000, are the result, not of economic superiority, but of public aid. If it be objected, as it very well can be, that had the Belgian system charged as high rates as the Northern its traffic would have decreased in volume, this additional \$300,000 a year of state aid can be utilized to offset any advantage which in these calculations may have been accorded the Belgian system.

Thus, the accounts of the two systems, barring certain reserve funds of the French Northern, which the Belgian system has not established, will be found approximately to balance, and it will be seen that even from the standpoint of economic efficiency, private enterprise in this case has shown astonishingly little evidence of its rather generally conceded superiority.

CHAPTER VIII

RESULTS OF GOVERNMENT OWNERSHIP (*continued*)

FINANCIAL RESULTS

It is commonly urged by the opponents of Government ownership, that wherever Government railways give as good or better service and charge as low or lower rates than do corporation lines, they do this at the expense of the taxpayer. In other words, it is asserted that this apparent superiority of Government railways is only achieved at the cost of financial losses, resulting in deficits which have to be made up out of the State or national treasuries. This popular hypothesis belongs to that prolific and variegated species of economic theory which might not inappropriately be termed the orchid variety, since it requires no solid ground of fact in which to germinate and put forth a luxuriant literary foliage. It has flourished in the higher atmosphere of the constructive imaginations of certain economic and political theorists for over half a century, based only upon their scholarly assumptions of what ought to be the facts in the case.

It is true that Belgium never has endeavoured to turn her railway system into a dividend-producing property. On the contrary, in the law which provided for State construction of the first Belgian railway, such a contingency was carefully and specifically provided

against, the theory being that the roads were to pay their own way, pay the interest on the bonded indebtedness, and gradually pay off that indebtedness; and that whenever profits tended to rise too much above what was necessary for these three purposes, rates should be lowered. Switzerland has followed the same plan, while Germany, far from being open to criticism for the unsatisfactory financial results of its state railways, has been criticized for a quarter of a century because of the golden stream of profits which during this entire period they have poured into the German state treasuries.

FINANCIAL RESULTS OF PRUSSIAN STATE RAILWAYS

Unquestionably, the Prussian state railways have made the best showing, financially, of any government railways in the world. In spite of the fact that state management has given to the people of Prussia the best and safest transportation service on the continent of Europe, and has charged for that service as little as, if not less than, has any continental private railway, at the same time the Prussian state railway system, during the last quarter of a century, has paid into the state treasury every year enormous sums of money as profits. In fact, the Prussian state railway management is open to criticism, not because its financial results have been too poor, but because they have been too brilliant. In an ideal state railway organization no such profits would have been permitted to be levied as a tax upon the commerce and industry of the country, in order to lighten the burden of

general taxation. Following is a table giving the amount of net profits produced by the Prussian state railways during the decade ending 1908 :

<i>Fiscal Year.</i>	<i>Net Profits. Marks.</i>	<i>Net Profits.¹ Dollars.</i>
1898	351,230,000	83,692,700
1899	384,230,000	91,446,700
1900	396,270,000	94,312,300
1901	356,690,000	84,892,220
1902	387,440,000	92,210,700
1903	465,730,000	110,843,740
1904	492,550,000	117,216,900
1905	552,240,000	131,433,100
1906	581,660,000	138,435,100
1907	626,310,000	149,061,800
1908 ²	615,960,000	146,598,500

But even this brilliant showing does not tell the whole truth of the matter. It is not generally known, but it is none the less true, that immense sums every year have been charged by the administration to operating expenses which do not properly belong there. The Prussian administration repeatedly has charged the cost of new locomotives and cars to operating expenses, and I have heard stated on good authority that large sums properly chargeable to permanent improvements have also been charged every year to operating expenses. However, as no trustworthy railway authority ever has gone into this matter in sufficient detail to be able to give in a clear and convincing way the exact amount of profits yielded to the Prussian Government by its railway system, we shall have to be content with a statement of the general financial results, which all reliable authorities recognize as having been, at least

¹ *Statistisches Jahrbuch für den preussischen Staat*, 1909, p. 230, col. 6.

² Estimates.

from the standpoint of the treasury, eminently satisfactory.

In summing up the financial results of the Prussian railways from their purchase by the State down to the present time, Professor B. H. Meyer says : ¹

‘ Not counting the millions which the Prussian railways have paid in taxes to subordinate political units, averaging during the last five years almost exactly 13,000,000 marks, or about \$3,250,000 annually, they have paid into the state treasury more than enough to pay off every cent of railway indebtedness, including interest, leaving the great system of over 20,000 miles with all equipment as a net asset in the hands of the state. This, too, in spite of the fact that unprofitable branch lines have been constructed, which private capital probably never would have attempted, and that no account has been taken in the present approximate estimate of the interest on the aggregate of one thousand millions of dollars (\$1,000,000,000) which has been taken out of net earnings year by year for general state expenses since 1882.’

FINANCIAL RESULTS OF SWISS STATE RAILWAYS

Of course it is too early as yet to speak definitively of the results of this experiment in democratic railway management. On looking over the literature of the subject, one is therefore astonished to find that less than a year after the Government had taken possession of the railways, and with nothing but ‘ estimates ’ on which to base his conclusions, M. Henri Haguet, editor of the *Journal des Transports*, wrote a booklet entitled *The Purchase of the Swiss Railways and its Consequences*.

¹ ‘ Government Regulation of Railway Rates,’ *Journal of Political Economy*, February 1906, p. 96.

He condenses the results of his investigation into the following concise dictum : ' The conclusion which is forced upon us can be summed up in two words—the Swiss purchase has been a mistake and will prove a disappointment.'¹ This opinion, apparently, is unequivocal, authoritative, and final. His little volume would be a negligible quantity but for the fact that many economists and politicians in France, Italy, and elsewhere, taking him, or *pretending to take him seriously*, have given his statements wide publicity and authoritative credence. Among the economic writers of our time, I know of no one who can approach him in either ' the extent or the variety of his misinformation '. Here are two examples of his method of scientific research :

' They pretended to demonstrate,' he says, ' that government management was superior to private management. Now here is the official report for the year 1901, the last published : the surplus of the gross receipts of the Central was 340,000 francs less than the surplus realized by the company during the last year of its management. As to the surplus of the North East, it was in 1901, 2,531,000 francs less than that of 1900, the last year of the company.'²

He carefully omits to state, first, that the Swiss railways which were still owned and operated by private companies had an equal falling off in their gross receipts during the year 1901 ; secondly, that the railways of every European country had a similar experience ;

¹ *Le Rachat des Chemins de Fer suisses et ses Conséquences*, Henri Haguët, p. 3.

² *Ibid.* p. 4.

thirdly, that every other industry in Europe was affected in the same way by the same *general economic depression*; and fourthly, that during the year 1901, of which he speaks, the Central, though owned by the Government, was managed by the old company for the Government, the purchase contract having provided that the company would continue 'to administer and manage the line until December 31, 1901, for the Confederation'. As for the North East, of which he also speaks, the *contract relative to its purchase was not submitted to Congress until the 8th of November, 1901*, so that any sins of mismanagement for that year certainly must be sins of private management.

The second example of his peculiar method occurs on the last page of his booklet, where he publishes the table printed below :

COMPARATIVE BUDGETS OF THE CONFEDERATION. IN FRANCE

<i>Years.</i>	<i>Receipts.</i>	<i>Expenditures.</i>	<i>Surplus + Deficits -</i>
1897 (message) . . .	91,556,547	87,317,364	+ 4,239,179
1898	95,277,453	94,109,943	+ 1,167,510
1899	100,476,336	98,052,644	+ 2,423,692
1900	101,003,716	102,757,839	+ 1,724,123
1901 (purchase) . . .	101,924,682	105,533,089	- 3,608,407
1902 (estimates) . . .	102,240,000	108,120,000	- 5,880,000
1903 (estimates) . . .	106,430,000	110,545,000	- 4,115,000

This table is striking. At a glance it tells the story of the slow but steady sinking of the little Swiss Republic into the slough of financial disaster and ruin as a result of the purchase of her railways by the Government. Fortunately, Professor Milhaud, of the University of Geneva, having carefully examined the

documents in the case, arrived at somewhat happier results. He found, first, that the deficits commenced not with 1901, the first year of Government ownership, but with 1900, the last year of private ownership ; secondly, that the Government owned only one line of road during the whole year of 1901, and that this line was managed for that year by the old company for the Government ; thirdly, that while in their estimates the Government counted on a deficit in 1902 and 1903, as a matter of fact this estimate was too pessimistic—there being a surplus of 660,759 francs for 1902 and of 2,471,697 francs for 1903. The table as revised by Professor Milhaud is as follows :

COMPARATIVE BUDGETS OF THE CONFEDERATION.¹ IN FRANCS

<i>Years.</i>	<i>Receipts.</i>	<i>Expenditures.</i>	<i>Surplus + Deficits —</i>
1897 (message) . . .	91,556,543	87,317,364	+ 4,239,179
1898	95,277,453	94,109,943	+ 1,167,510
1899	100,476,336	98,052,644	+ 2,423,692
1900	101,003,716	102,757,839	— 1,724,123
1901 (purchase) . . .	101,924,682	105,533,089	— 3,608,407
1902	107,208,831	106,542,072	+ 660,759
1903	112,558,270	110,086,573	+ 2,471,697

But furthermore, as M. Haguët must have known, in Switzerland there could not be any possible connection between a railway deficit and a government deficit, for the budget of the railways is kept absolutely separate and distinct from the budget of the Confederation, in accordance with Article 8 of the law of October 15, 1897. To be sure, M. Haguët was careful not to say in so many

¹ *Le Rachat des Chemins de Fer*, Edgard Milhaud, p. 45.

words that the mismanagement of the Federal railways caused the deficits in the national budgets, but his table says it for him with exceptional clearness and force.

It would be entirely unreasonable to expect at this early date any very striking results from this interesting experiment. It is apparent that for the next half century the yearly instalments toward the purchase price of the railways must absorb a large percentage of their net profits, and no matter how desirable certain reforms may be, that they can only be brought about one at a time, or rather part of one at a time, year by year, as the financial resources of the railways permit. It must be very satisfactory, therefore, to the Swiss Government and people to realize that during the short period of eight years of actual Government management considerable real and substantial progress has been made. Rates have been lowered, wages raised, hours of labour shortened, the service improved, and at the end of sixty years or thereabouts, the people will be the proprietors of their railways, which actually will have paid for themselves out of profits.

Contrary to the statements which have gained wide publicity, to the effect that the Swiss State railways year after year were having to face deficits, the facts of the case are that every year since the purchase of the roads by the Government up to 1908, the management has found itself with a surplus on its hands. These surpluses have not been large, for the simple reason that they were not meant to be large; that there was no object to be gained by taxing the travelling and shipping public of the country, to make them large. The following

table shows the surpluses and deficits¹ of the Swiss state railways from 1902 until 1909 inclusive :

SURPLUSES AND DEFICITS OF SWISS STATE RAILWAYS. IN FRANCS

1902	+4,422,420
1903	+1,030,682
1904	+60,735
1905	+651,734
1906	+4,828,523
1907	+2,854,206
1908	—5,393,354
1909	—4,091,019.80

FINANCIAL RESULTS OF ITALIAN STATE RAILWAYS

It is a matter of common knowledge that the Italian

¹ The deficits for 1908 and 1909 are easily accounted for by the peculiarly unfavourable economic conditions against which, for some time, the roads have had to contend. During the past ten years the cost of practically all their supplies has gone up approximately 25 per cent, while freight and passenger rates have remained stationary. Moreover their difficulties were considerably augmented by the economic depression of 1907 and 1908, which affected adversely practically all railways, as well as all other forms of industry the world over. It is noteworthy in this connection that the Gothard, the only important Swiss line remaining in private hands in 1908, suffered more severely from these influences than did the government lines—its increase in receipts from 1903 to 1908 being only 25 per cent, whereas theirs was 28 per cent, and its increase in expenditures being 66 per cent, whereas theirs was only 42 per cent.

The truth of the matter is that the Swiss Federal Railway Administration is to be highly commended for its energetic and successful handling of this intensely difficult situation. It cut down expenses in every legitimate way, such as suppressing all superfluous trains, and reducing its working force as much as could be done without impairing the efficiency of the service; and yet, during these years of deficit, it courageously continued the policy begun in 1906, of voluntarily adding a supplement to the salaries of all employees, in order to enable them to maintain a reasonable standard of comfort in the face of an ever-increasing cost of living. This supplement in 1908 amounted to 2,539,280 francs, and in 1909 to 4,865,628.75 francs.

Happily the period of deficits seems already to have been brought to an end. For the first half of 1910, the increase in receipts has been 4,630,000 francs and the decrease in expenditures has been 690,000 francs, making a financial advance over the same period in 1909 of 5,320,000 francs.

corporation roads gave the country a very unsatisfactory service, for which they charged unsatisfactorily high prices, and that even then they did not attain satisfactory financial results. According to orthodox economic doctrine, it was to have been expected that the Government railway management in Italy would make a worse mess of things than the former corporation management had done. Fortunately, however, this expectation has not been realized, and while State railway operation in Italy has not had a long enough trial to enable us to make an entirely satisfactory comparison of the results of the new State management with those of the old corporation management, at the same time, the institution of such a comparison brings to light the fact that the Government is slowly succeeding in bringing some sort of order out of the transportation chaos which has existed in Italy for nearly half a century.

It must not be forgotten that during the first two years of State management everything connected with the Italian railway administration was abnormal. There were a number of reasons for this : in the first place, Italy most unwisely and without any previous preparation whatever, turned a sudden somersault from a corporation régime to a State régime of railway management ; secondly, for the first two years the roads were operated under the law of April 22, 1905, which every one recognized to be a provisional law, a purely temporary makeshift ; thirdly, when the Government took possession of the roads, they were in such a frightfully run-down and dilapidated condition as to make it apparent that something like a billion lire (nearly two hundred

million dollars) and ten years of hard work would be required before the roads could be put into first-class condition, and operated on a normal basis. Concerning the financial results of State management U.S. Consul James E. Dunning, of Milan, says :¹

‘The different companies kept their books in different ways, which cannot be reduced to any known system of tabulation such as would render practicable an exact setting-off of expenses and earnings under the two forms of management. While one of the companies kept its books in such a way as to make study fairly easy, another’s system (for instance, in the fact that it made no separate charge for administration expenses but let them remain in the general statement given by each department of operation), was so different and so indefinite as to baffle productive perusal. It is further, of course, true that the government was under such a heavy expense for rehabilitation, damages and repair during the first year of its assumption of control, as to render any hard and fast comparison unfair to its side of the case. . . . As nearly fair a statement as could be devised by a student of the situation is perhaps to be presented thus :

TABLE I
GROSS EARNINGS AND OPERATING EXPENSES OF LINES

	<i>State Control of the Lines, 1905-6.</i>	<i>Private Control, 1904-5.</i>
	<i>Dollars.</i>	<i>Dollars.</i>
Gross Earnings	65,405,456	62,295,528
<i>Expenditures.</i>		
Maintenance of Way	7,052,057	5,946,222
Traction and Rolling Stock . .	18,027,644	16,910,084
Movement of Traffic	12,548,810	16,395,378
Administration	2,990,077	1,559,884
General Expenses	2,363,991	2,505,113
Total Cost of Operation . . .	42,982,579	43,316,681

¹ *Report on Italian Railroads*, p. 29.

170 RESULTS OF GOVERNMENT OWNERSHIP

In accordance with this table, it will be seen that the State for the year 1905-6 earned \$3,109,928 more, and expended \$343,102 less than did the companies in the year 1904-5. This is not a bad showing for the first year.

The following tables, taken from the official reports and verified by Ing. Filippo Tajani, the author of the most authoritative work on Italian railways that has been published of recent years,¹ while they indicate a condition of affairs that is not at all discreditable to the State administration, yet do not seem to show quite as favourable results as does the above table :

RESULTS OF CORPORATION MANAGEMENT FOR 1903. IN LIRE

Operating Expenses	230,410,279
Reserve Funds	21,440,689
To Companies as Interest on Purchase Price of Rolling Stock, &c.	15,348,650
Rent of Old Local Lines	6,142,756
Total	273,342,374
Net Earnings for State	63,844,862
Gross Receipts	337,187,236

RESULTS OF STATE MANAGEMENT FOR 1906-7. IN LIRE

Operating Expenses	301,978,654
Renewals, Improvements, and Reserves	45,130,934
To Companies as Interest on Purchase Price of Rolling Stock, &c.	22,264,618
Rent of Old Local Lines	10,765,977
Total	380,140,183
Net Earnings	50,770,593
Gross Receipts	430,910,776

¹ *Le Strade Ferrate in Italia.* Ulrico Hoepli, Pub., Milan, 1905.

Thus in spite of an increase in the gross receipts of 78,917,468 lire, we find a diminution in the net receipts of 13,074,269 lire, or in the neighbourhood of two and a half million dollars. The causes of this are apparent. The amount devoted to renewals and reserve funds having been more than doubled, alone more than makes up for the diminution in net receipts. Thus the State is seen to have cut down her net receipts in order to take the 'stitch in time that saves nine'. She is thus seen to be more far-sighted and businesslike than was the old private management. However, the amount of money devoted to every other item in this statement has been increased, while the increase in operating expenses has been especially large, amounting alone to 61,042,203 lire. The following analysis of operating expenses shows where this increase has gone.

OPERATING EXPENSES OF LINES. IN LIRE

<i>Operating Expenses.</i>	<i>Corporation Management 1903.</i>	<i>State Management 1906-7</i>	<i>Difference Plus or Minus.</i>
General Expenses of Administration	24,365,227	43,642,429	+19,277,202
Traction and Rolling Stock	91,073,179	120,777,327	+29,704,148
Movement and Traffic	75,124,202	90,558,898	+15,434,696
Maintenance of Way	50,373,843	47,000,000	- 3,373,843
Total	240,936,451 ¹	301,978,654	+61,042,203

The above increase in the expenses of administration can very largely be accounted for by the addition to the

¹ 240,936,451 lire is the amount of actual operating expenses for the year 1903, the sum of 230,410,279 lire given in the first table for that year being the amount allowed for operating expenses from that year's receipts.

ordinary expenses, of the cost of reorganization involving the services of several hundred additional employees. Moreover, the value of the comparison of the expense involved in connection with this particular item is not enhanced by the statement of Consul Dunning to the effect that, 'One of the companies made no specific item of administrative expenses.' Until the period of reorganization is past, it will be difficult, if not impossible, to say to what extent the State administration is top-heavy and unnecessarily costly.

The only item on which the State has expended less than did the companies is that of 'maintenance of way', on which the amount expended was perhaps thus reduced because, in the first place, the Government was devoting millions of dollars of additional capital each year to the reconstruction of the 'way'; and secondly, as has already been stated, because it added 23,690,245 lire more to the reserve funds this year than did the companies in 1903, which sum was to be used for practically the same purposes as was the money spent on 'maintenance of way'.

In considering the above comparisons, the important fact must not be forgotten, that in the net earnings of the private roads are included the sums (*reintegri*) paid by the Government to the roads to reimburse them for reductions they had consented to make in the freight rates for agricultural products from the south of Italy. These bonuses, of course, are not included in the net earnings of the State railways. And, moreover, the State Railway Administration, in its report for 1906-7, states that the increase in the salaries of its employees

and the cost of the establishment of important bureaus not made use of by the companies, together amounted to 16,670,000 lire, or over \$3,000,000, for that year.

Taking into account all of these various factors, it becomes apparent that even at the start the Italian State railway management has succeeded in making a more creditable showing financially than was expected even by most of its friends.

FINANCIAL RESULTS OF FRENCH STATE LINE

In spite of all the reductions in rates and improvements in service which have been made of recent years by the French State line, its receipts have continued to increase in the most encouraging way. In 1888 the gross receipts of the State line were 13,386 francs per kilometre ; while in 1905 they had risen to 18,457 francs per kilometre, making an increase of 37 per cent. For the company lines, on the other hand, during the same period the gross receipts per kilometre rose from 36,787 francs to 42,309 francs per kilometre, an increase of only 15·01 per cent.

A comparison of the increase in net receipts makes an even more favourable showing for the State line. The net receipts of the State line in 1889 were 3,139 francs per kilometre, whereas in 1905 they had risen to 5,108 francs, an increase of 62·73 per cent. For the companies, the increase during the same time was from 18,371 francs to 20,793 francs, a net increase of only 13·18 per cent.¹

On looking at these figures, one is at once struck by

¹ *Rapport*, by M. Marcel Régnier, 1906, pp. 16, 17.

the fact that, whereas the State line increased its net receipts nearly twice as much as its gross receipts, the companies were unable to make as large an increase in their net receipts as in their gross receipts. Surely this state of affairs would seem to indicate that the management of the State line was fully as businesslike, as economical, and as efficient as that of the company lines.

In the light of these facts one is not surprised, therefore, that even Mr. C. Colson, who ordinarily stands up stoutly for the companies and for private ownership of railways, has yet been forced to admit that

'all those who have given careful and close attention to the management of the State railway since it has emerged from its first troubled stage, recognize that, from the point of view of expenditures, this management is in no way inferior, either in efficiency or economy, to the management of the great private companies.'¹

In the face of this, to some people, rather amazing success of the State line of France, it is interesting to recall the diatribe of the great orthodox *laissez-faire* economist and politician, M. Léon Say. In 1882 he said :

'It is very easy to-day to convince oneself that the operation of this line by the State is one of the most colossal errors that one could have committed. The misfortune is absolute and irremediable. The Budget is crippled, that is evident ; the people that are being served are not contented ; this is certain. There is to be found, then, in this step neither economic nor political advantage. We cannot

¹ 'Les Chemins de Fer et le Budget de la France,' *Bulletin de la Commission Internationale du Congrès des Chemins de Fer*, vol. viii, 1896, p. 175.

continue otherwise than for the purpose of trying the most uncertain and the most costly experiments at the expense of the tax-payers. It is a disaster.

‘The maintenance of this institution, without roots and without reason, resembles the prolongation of the existence of certain industrial enterprises that do not dare to settle up their accounts for fear of bringing to light their losses, and that one unites successively with a series of new enterprises, in order to hand on to others the responsibility of a final settlement. It is a burden; it is a ball, which the Budget drags at its feet, and of which it must cut the chains as soon as possible.’¹

The following year, M. Paul Leroy Beaulieu, the evening before the discussion of the question in the Chamber of Deputies, wrote as follows :

‘The State railway system seems to us to be for the public finances a sort of open sore—or, if you wish a comparison more agreeable, it is a plaything of the most costly sort. When the State shall have arrived at ideas less infantile, and when it shall comprehend better the grave state of our finances, it will place this railway system on sale. Unquestionably, it will receive as rent, or in the shape of interest on the price for which it is sold, larger profits than it receives to-day.’²

How wild and irrational all this sort of talk sounds to-day in the face of the *actual results* of State management. Even such strong partisans of private enterprise as M. Plichon and M. Modeste Leroy are now forced to admit that, in the words of the former, ‘The State road is at present operated in an entirely satisfactory way.’³

¹ *Journal des Économistes*, October 1882, pp. 162–5.

² *Journal des Débats*, July 7, 1882.

³ *Journal Officiel*, séance du 21 janvier 1904, p. 51.

Perhaps no better *résumé* of the situation has been given than that which was drawn up on March 12, 1900, by the Chamber of Commerce, at La Rochelle. Among other things this memorial says :

‘ The State system, as it was constituted in 1878, by the purchase of little bankrupt or unprofitable companies, and then as reconstituted by the contracts of 1883, without any direct connection with Paris, and surrounded on the north and on the east by private companies, of which it is merely a tributary, is not in a condition to permit of any serious comparison between the results of its management and those of the private companies ; but, in spite of this unavoidable situation, the State system has been able to make the best of the lines which, *simply because otherwise they could not have continued to exist*, were confided to its management.

‘ By a unification of the freight and express rates, by the lowering of the price of transportation, and by increasing the rapidity of the transportation of everything, the State has developed the vitality of the south-western region which it serves, and as a consequence, its receipts have been raised from 25,000,000 fr. in 1885, to 46,000,000 fr. in 1898.’¹

FINANCIAL RESULTS OF BELGIAN STATE RAILWAYS

A glance at the financial statement of the Belgian railways from the beginning shows that there was a railway deficit regularly every year from 1835 to 1852. To the student of railway history this is not at all surprising. What does seem rather extraordinary, however, is the fact that in spite of this constantly recurring deficit, neither the Belgian Government nor the Belgian people ever could be prevailed upon to give up this

¹ *Le Rachat des Chemins de Fer*, by Professor Edgard Milhaud, pp. 146-7.

policy, and to turn over the existing State railways to private enterprise. When a proposition of this nature was made in the Chamber of Representatives in 1849, the 'rapporteur' of the 'Section Centrale' denounced it as a scheme of greedy financiers, and the Minister of Public Works was applauded by the deputies for declaring that any attempt to subject the great national arteries of commerce to the control of private interest would be a 'shame and a calamity'.¹

That the Belgian people thus stood by the principle of State ownership of railways during sixteen long years of discouragement and financial loss, is a most remarkable demonstration of the deep-seated determination on the part of this people to preserve, at any and every cost, all that had so far been attained by them in the way of industrial and commercial freedom.

To be sure, we now know, in the light of the railway history of the world, that almost all new railways in countries not having a highly developed industrial life, have been run at a loss for the first few years of their existence. These losses almost invariably have been borne by the Governments of the various countries through which they ran. When the railways have been in private hands, the Government has been required to make up these losses by means of subsidies, land grants, guarantees of interest, loans that never have been repaid, and in various other ways, and when the roads have been owned and operated by the Government, these losses have taken the form of deficits. The essential difference between the losses

¹ Speech by M. Vandervelde, Chamber of Deputies, June 18, 1897.

incurred by private railways and by State railways, while getting under way and developing a paying traffic has been that, as a rule, the subsidies, land grants, guarantees of interest and loans, with which the Government has had to come to the aid of corporation railways *have never been repaid*, in fact have been a dead loss to the Government, except for the indirect benefits accruing therefrom, whereas, the deficits of Government roads in the long run almost always have been repaid with interest. In a word, under private ownership the losses, as a rule, have been a burden on the tax-payers—a *gift* of the public to the railways, whereas, under Government ownership, these losses have only been a *loan* of the tax-payers that eventually has been repaid. Unquestionably, under both régimes, the stimulus to commerce and industry resulting from the building of the railways has vastly more than counter-balanced the financial losses assumed by the Government, but while the general industrial development of the country has been the *only* return which the public has received on the moneys advanced to private railways, it has received in return for the moneys advanced to State railways not only this industrial stimulus, but also the original capital, together with interest on the same.

It would be hard to say how many tens of millions of dollars the American Federal Government, our State Governments, our counties, townships, and municipalities have had to contribute, in order to secure the construction in this country of an adequate railway system. The one thing which is certain, however, is

that practically none of this ever has come back, except in the form of indirect benefits.

In Belgium, on the other hand, we have an example of a country which, like our own, has been revolutionized industrially, through the instrumentality of its railways. No country in the world, of its size, has received greater indirect benefits from its railways than has Belgium, and yet at the same time, every dollar which Belgium has invested in its State railways, whether for purposes of construction, or for the making up of the deficits of the lean years, has been repaid, together with the market rate of interest, from the profits of the fat years. In the original law of May 1, 1834, authorizing the construction of the first Belgian railways by the Government, all idea of running them for a profit was completely eliminated. According to Article V of that law, there were three and only three objects to which the income of the roads was to be devoted : first, the payment of interest on the capital invested ; second, the liquidation of the bonded indebtedness ; and thirdly, the supplying of operating expenses and of funds for the general maintenance of the roads. Consequently the policy of the Belgian roads has always been to keep rates down so low, and the service up to so high a standard, that in the long run the roads would come out as nearly even as possible. At the close of the year 1905, as a result of this policy, there has been paid into the National Treasury during the whole history of the Belgian State railways, a net profit of only a little over seven million dollars. This does not take into account the value of

the national fortune amounting to \$54,136,000, which is tied up in the roads,¹ owing to the fact that during three-quarters of a century they have been gradually liquidating their bonded indebtedness out of their yearly net profits.

CONCLUSIONS

Thus after a careful survey of the results of Government ownership of railways in the leading countries of continental Europe, we are forced irresistibly to the conclusion that these Government roads can boast of having given better service and lower rates to the travelling and shipping public, and better pay and better conditions of labour to their employees than have the corporation railways of the same countries. In addition to all this, the financial results of these roads have been entirely creditable. In the long run, no deficits have been created by any of the Government railway systems under consideration, and profits have been gained which have proven sufficient for all the requirements of the service, including the payment of interest on their bonded indebtedness as well as a certain amount each year toward the liquidation of that indebtedness.

Whereas in Germany the liquidation of the bonded indebtedness of the roads has been unsatisfactorily slow, this delay has been caused by no lack of funds, but by the wrong attitude of the sovereign Government, which has appropriated the profits of the railways and devoted them to its own uses.

¹ Table 10, pp. 90, 91, Report for 1906 of Minister of Railways, Post Offices, and Telegraphs.

These statements are not matters of opinion. They are facts which the statistical data just examined in considerable detail, demonstrate to be true beyond the peradventure of a doubt. Unquestionably, any one is entitled to hold the belief, if he cares to, that our country is incapable of doing successfully what all these European countries have done. But, after a careful examination of the foregoing facts, it would seem no longer permissible to dispute the statement that, *in Europe* at least, Government railways on the whole have been more satisfactory and more successful than have the corporation-owned lines.

CHAPTER IX

CAN AMERICANS AFFORD SAFETY IN RAILWAY TRAVEL ?¹

DURING the past few months the question of railway accidents has been vigorously discussed by all of our newspapers and most of our magazines, as well as by Congress and many of our State Legislatures. Moreover, as the apprehension felt by Mr. J. J. Hill 'lest every railway journey might be his last', has been shared for some time by practically the entire travelling public, the question, 'What are we going to do about it?' has at last become a subject for debate on nearly every street corner, and a topic of conversation at practically every fireside in the land.

While it is perhaps true that so far this agitation has generated more heat than light, yet we must not fail to recognize that it has produced at least one notable result. The problem before us finally has been reduced to a single ultimate issue: Can we, the American people, afford a reasonable degree of safety in railway travel? From whatever standpoint we approach the question of railway accidents, we are certain in the end to be brought up sharply face to face with this decisive question. Safety costs money; are we able and willing to pay for it?

¹ From *McClure's Magazine*, August 1907.

ACCIDENTS IN AMERICA AND EUROPE

Practically every other civilized nation in the world has attained a far greater degree of safety in railway travel than we enjoy. Whether this is because they value their money less or their lives more it is hard to say. In any event, it is both interesting and important to know that countries vastly poorer than our own are yet able to afford the luxury of a degree of railway safety which, so far, we have felt constrained to deny ourselves.

Owing to differences in the statistical methods employed, it has been found impossible to make comparisons of the degree of safety attained by the various countries which, from a theoretical standpoint, are entirely accurate and satisfactory; but some of the best statisticians and ablest railway specialists in the world have been at work on the subject and have arrived at results which are quite accurate enough for practical purposes. The greatest of these specialists are agreed that in this country railway travel and railway employment are from three to five times as dangerous as in the leading European countries.

Mr. Acworth, the most conservative as well as the most prominent railway authority in England, says that the English companies do their work 'at one-third of the risk, whether for passengers or employees, which is incurred in America, according to American figures'.¹

The late Professor Frank Parsons, of Boston, in his

¹ *The Railways and the Traders*, p. 233.

monumental treatise on the railway question, sums up the situation by saying that

' railway travel in the United States is about six times as dangerous as in Germany, seventeen times as dangerous as in Belgium, three times as dangerous as in France, and four times as dangerous as in Great Britain.' ¹

Mr. Carroll W. Doten, of the Massachusetts Institute of Technology, in his careful and detailed study of railway accidents in the United States and Great Britain, made for the American Statistical Association, shows in a series of eighteen statistical tables, that in the United States the danger to passengers is about four times as great, and the danger to employees about five or six times as great as in the United Kingdom.

Messrs. Hoff and Schwabach, in their remarkable work entitled *Nordamerikanische Eisenbahn*, have demonstrated that while American roads kill 6·43 and wound 50·01 persons for every million kilometres travelled by the travelling public, the Prussian roads kill only 1·70, or one-fourth as many, and wound only 3·38, or one-fourteenth as many.

Of all the methods of comparison which have been employed by writers on this subject, that of comparing the number of killed and wounded, per million miles travelled, is universally admitted to be the fairest and the most exact yet discovered. The following table gives the results of an effort to reduce the railway accident statistics of four widely different countries to this common denominator :

¹ *The Railways, The Trusts, and the People*, p. 444.

NUMBER OF PASSENGER-MILES TRAVELLED FOR EACH PASSENGER KILLED ¹

	1902.	1903.	1904.	1905.
United States	57,000,000	58,000,000	49,000,000	44,000,000
Hungary . .	137,000,000	175,000,000	130,000,000	152,000,000
German Empire	172,000,000	189,000,000	201,000,000	133,000,000
Belgium . .	292,000,000	458,000,000	315,000,000	337,000,000

The next table shows that in the year 1905, every time a passenger travelled a mile in the United States, he ran a risk of being killed that was three and one-half times as great as he would have run in Hungary, over three times as great as he would have run in Germany, and over seven times as great as he would have run in Belgium while travelling the same distance.

RELATIVE DANGER OF TRAVEL IN 1905

United States	1	killed for every	44,000,000	passenger miles travelled
Hungary . .	1	" " "	152,000,000	" " "
Germany . .	1	" " "	133,000,000	" " "
Belgium . .	1	" " "	337,000,000	" " "

In response to such an array of facts, it is sometimes urged that if we are to make railway travel as safe in America as it is in Europe, we must more than quadruple our railway capital and build our roads as solidly as European peoples have done. That it will cost a considerable amount of money to make railway travel in this country as safe as it is in Europe, cannot be denied. But the fact that the German and Belgian railways afford even greater safety than the British roads at less than half the cost, indicates clearly that safety in railway travel is as dependent upon an intelligent expenditure as upon a sufficient expenditure of money.

¹ *Statistical Abstract, &c., 1907.*

It is urged also that we cannot expect our fast trains to be as safe as are the slower European trains. This sounds almost axiomatic until we come to realize that Germany, France, and England, all have as many fast trains per thousand miles of track as we do, if not more. Messrs. Hoff and Schwabach have shown in some minutely detailed tables,¹ that the single German state of Prussia has forty-three trains which maintain an average speed of thirty-eight miles or more an hour, whereas our great lines connecting New York, Buffalo, Pittsburg, Chicago, and St. Louis, have only twenty-six such trains. Moreover, they show that as to punctuality and attention to local service the advantage is all with the Prussian roads.

TRAVEL IN UNITED STATES INCREASINGLY DANGEROUS

We might more easily excuse our unenviable pre-eminence among civilized nations in the matter of railway disasters, were it not for the fact that our record in this particular is growing steadily worse. Not only have our railways killed about 10,000 people and mangled over 80,000 more each year for the past four years; and not only is this frightful slaughter increasing with the increase in the number and length of our roads, and growing with the ceaseless growth in density of traffic on existing lines; but, in spite of all our present life-saving appliances, accidents actually are on the increase per mile of road and per passenger carried. To such an extent is this true that every time an American takes a railway trip, he runs

¹ *Nordamerikanische Eisenbahn*, pp. 60, 63.

more than twice as great a risk of being killed and over three times as great a risk of being injured as he did ten years ago. This is demonstrated to a mathematical certainty by the following table prepared by the Interstate Commerce Commission :

<i>Year.</i> ¹	<i>Number of Passengers Carried for one Killed.</i>	<i>Number of Passengers Carried for one Injured.</i>
1895	2,984,832	213,651
1904	1,622,276	78,323
1905	1,375,856	70,655

Where is this growing horror going to stop ? In another ten years, *at the present rate of increase*, our railways will have killed and maimed over a million and a half of people, while the number of victims for the tenth year—1915—alone will be more than 215,000. If this wholesale butchery were the result of war, of famine, or of pestilence, those age-long enemies of our kind, the entire nation would long ago have risen up to demand that at any cost, save that of honour, this slaughter be made to cease.

If, on the other hand, this continuous and sickening roll-call of death were a necessary concomitant of our growing industrial supremacy, we might feel inclined, as an intensely practical and commercial nation, to make a virtue of necessity, and point with pride to the number of our industrial victims as an indication of

¹ *The Twentieth Annual Statistical Report of the Interstate Commerce Commission*, published in 1909, shows a decrease in accidents for the year 1906, but for 1907 a return to conditions practically as they existed in 1905.

bravery, as we are wont to point to the number of our dollars as an index of intelligence and worth. But even this poor satisfaction is denied us. At least 60 per cent of our railway accidents to passengers and railway employees are unnecessary and inexcusable.

VIGOROUS LEGISLATIVE ACTION NEEDED

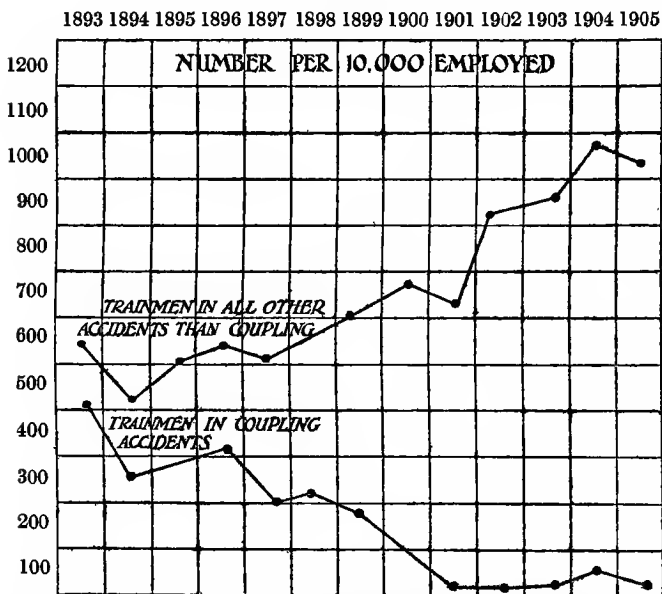
The first cause of this intolerable condition of affairs is the strange lack of adequate legislation on the subject by our States or by our National Government.

As a rule safety appliances have found their way into general use only as a result of governmental compulsion. The history of the introduction of the automatic coupler and air-brakes on American railways is familiar to us all. A majority of the railways fought the law compelling their introduction, and, after it was passed, in 1903, retarded its execution in every possible way. The following diagram, prepared by the Interstate Commerce Commission, shows how accidents caused by the coupling and uncoupling of trains have decreased steadily from the year the law went into effect. The upper line in the diagram shows that accidents arising from other causes, concerning which there has been no legislative action, have increased no less steadily.

In England the absence of grade crossings in cities and towns, and the careful provision made for the guarding of dangerous ones in the country districts, is due, not to the initiative of the companies, but to requirements laid down by Parliament from the very

start ; a provision for some means of communication, such as our bellcord, between passengers and the engineer, was also introduced only after a bitter parlia-

DEATHS AND INJURIES OF TRAINMEN FOR THIRTEEN YEARS



¹ 'TRAINMEN' INCLUDES ENGINEMEN, FIREMEN, CONDUCTORS, BRAKEMEN, AND OTHER TRAINMEN

mentary struggle extending through many years ; a little later, as a number of accidents were traced to the excessive fatigue and consequent dulling of the faculties of overworked engineers, switchmen, and dispatchers, the Government was forced to take a hand in the

regulation of the hours of labour of ' railway servants ' ; and still later the Board of Trade found it necessary to make compulsory the general use of air-brakes, the ' block system ', and other safety appliances. In addition to all this sort of State regulation, provision has also been made for prompt investigation, by a trained government expert, of every railway accident, in order to ascertain its cause and point out how its repetition can be avoided.

In Belgium, Germany, and Switzerland, where the railways are State-owned, even more careful precautions against accidents are taken than in England. A striking illustration of the superiority, in this particular, of State over company railways is to be found in Japan, where the number of accidents on company roads is more than twice as great as that on State lines :

NUMBER OF PASSENGER MILES TRAVELLED IN JAPAN FOR EACH
PASSENGER KILLED ¹

	1902-3.	1903-4.	1904-5.
State Railways	366,368,741	164,110,284	205,561,844
Company Railways	103,714,029	60,800,312	89,324,349

GRADE CROSSINGS

One of the most frightful causes of death-dealing railway accidents, and one to which surprisingly little attention has been paid by writers on the subject, is the fatal ' grade crossing '. Every one knows that unprotected or badly protected level railway crossings are nothing more nor less than death-traps, and yet

¹ *Statistical Abstract, &c., 1907.*

their name is legion in this country—their victims numbering 827 killed and 1,567 injured during the year 1905 alone. The general rule among civilized peoples is that in cities and towns a railway shall run over or under highways and other railway tracks, and that in country districts all dangerous crossings shall be protected by a gate, a flagman, or an electric alarm-bell. If American railways inspected their tracks and guarded their grade crossings as thoroughly as the German roads do, they would have to employ over 600,000 switchmen, track inspectors, gatemen, &c., instead of the paltry 50,000 employees of this character which they now have on their pay-rolls. Owing, however, to the greater alertness of American workingmen, and the wider use of the 'automatic block system' and other automatic appliances in America, together with the fact that our roads sometimes run for thousands of miles through sparsely inhabited regions, it seems probable that if an additional 200,000 employees were added to this branch of the service, practically the same degree of efficiency and safety might be obtained.

There has been a great variety of legislation, but at the same time a lack of adequate legislation, on this subject in the different States. A recent publication by the Interstate Commerce Commission says :

' Since 1890 there have been thirty-two enactments in thirteen States affecting the separation of grades at either new or old crossings; twenty States now have provisions permitting the separation of grades at highway crossings; sixteen States require the separation of such grades when ordered by the Railroad Commission or Court or other

agency ; moreover, six States have laws requiring the separation of grades at railroad crossings when ordered by the Railroad Commission or a Court.'

According to the Chicago Coroners' Report for 1905, eighty-five people were killed and a great many more were wounded at grade crossings in that city alone, not counting those killed in the railway yards and in the streets along which railway tracks are permitted to run. This record is all the more shocking when we realize that, as a result of a fatal accident at Forty-eight Street and Colorado Avenue, in October 1904, the railways have been required ever since to place a gate or a flagman at all such crossings. The fact thus becomes only too apparent, that the combined efforts of gatemen and policemen do not suffice to prevent the constant harvest of death which is reaped each year by these traps for the unwary. Grade crossings in cities and towns can be made safe in only one way—by being abolished. This lesson has been thoroughly learned by the Chicago city authorities, and the gradual abolition of all railway crossings at grade, within the city limits, is being pushed steadily forward.

It would seem that the time had come for every other municipality in the land to carry out a similar programme. There are grade crossings in innumerable small towns and cities in every State in the Union which are a never-ceasing menace to the lives of all passers-by. And as no national legislation is required, there is no excuse for allowing a continuation of this evil. As a matter of fact, this problem furnishes an excellent

opportunity for the advocates of State's rights and local self-government to demonstrate by effective State or municipal legislation that local governments are better able than the federal powers to deal with certain categories of social and economic questions. If State legislatures last winter had taken up the comparatively simple question of railway accidents with the same vigour they showed in dealing with the extremely intricate question of passenger rates, it is highly probable that even greater good would have been accomplished. The problem of abolishing preventable railway accidents is not only a simpler but a very much more vital question than that of regulating railway rates. No one, I believe, will dispute the fact that it is more important to ride safely than to ride 'cheap'.

THE BLOCK SYSTEM

It is not generally known that the 'block' system, which is used on over 99 per cent of the railways of Great Britain, is in use on only 23 per cent of the railways of this country, while on our single-track lines almost no use, as yet, has been made of the splendid 'train staff' system which has yielded such extremely satisfactory results in England. The Interstate Commerce Commission in 1903, and again this year, recommended to Congress the passage of a Bill requiring the general extension of the 'block' system to all our passenger-carrying roads. This is an excellent idea as far as it goes. But the introduction of the 'block' system on every line of American railway would do little good if the system were to be made a mockery of,

as it is to-day by many of our roads. The vital principle of the system, the principle which is lived up to religiously in European countries, and without which the system has little value, is that one train, and only one train at a time shall be allowed in a block. This principle is habitually disregarded every day and every hour by a great majority of the American roads pretending to employ the system.

In an important contribution on this subject, Mr. F. W. Haskell says :

‘ Many roads, having installed a perfect system of block signals, destroy its entire effectiveness by establishing the “ permissive block ”, or “ going ahead under the green ”. By this system a following train is given discretionary power to run into a block already occupied. This permission is always coupled with the injunction that the engineer must use caution, and “ at all times have his train under perfect control ”. But in actual operation “ caution ” usually means *not exceeding the maximum possible speed of the engine*.

‘ I once stood by the side of a busy line, with the signal engineer of the road. This line had a complete installation of block signals. We watched a dozen heavy freights rush by at thirty miles an hour, with not a hundred yards of daylight separating any two of them. I expressed surprise at the reckless disregard of signals ; and the officer said “ Freights run regardless of the blocks. We couldn’t get them over the road if we kept them a block apart.”

‘ I was once riding on the rear car of a through passenger train. We were being closely followed by the second section of our train. Our section was stopped in a deep rock cut, on a sharp curve. It was a very dark night and raining hard. I went to the rear platform, and for fully three minutes listened to the conductor and flagman swearing about

the weather. Finally the conductor said : " Well, I suppose you'll have to go back." The flagman started back, but had not gone two car lengths when the conductor yelled to him that he had gone far enough. Half an hour later we reached the terminus of the division, and we had not come to a full stop when the second section rolled in on an adjacent track.

' On the return trip of the same journey, I was again in the rear car. It was night, but clear. Our train stopped between stations, and again I went to the rear platform. In a few moments I heard the roar of an engine's exhaust. Then the headlight showed, the noise of the exhaust ceased, and I could hear the application of the brakes. The locomotive of the following train stopped within twenty feet of the rear of my car. I said to the brakeman : " Isn't this division equipped with block signals ? " He replied, " Yes, but that is the second division of this train." I said, " Oh, I see. It doesn't hurt to be hit by another section of the same train." The brakeman said nothing, but looked weary and left me.' ¹

Such habitual violation of railway rules and regulations by employees, not only with the connivance of the highest officials, but with the knowledge on the part of the employees that if these rules are not regularly and discreetly broken, in order to ' save time ' and ' get the work done ', a man has no chance of preferment and little chance even of holding his job, is fundamentally vicious.

The present situation brings up the question as to the possibility of rendering compulsory the utilization, by the roads, of the latest improvements on the ' block system ', such as the ' Kinsman automatic stop ',

¹ *Engineering Magazine*, December 1904, p. 10.

which automatically arrests a train at a danger signal, in case the engineer, from stupidity, fatigue, or negligence, fails to stop it himself ; or some one of the automatic switch operating devices, which have demonstrated that they can do away entirely with the ever recurring derailments and collisions due to the fatal ' open switch '. There were nine wrecks due to this one cause during the month of March 1907, and in one of them, on the Southern Pacific at Colton, California, March 28, twenty-six people were instantly killed.

These and other inventions of various sorts, if properly installed, would be the means of saving hundreds of lives every year. But the railways show little inclination to make any general use of them. It is a matter for hearty congratulation, therefore, that the Interstate Commerce Commission has secured from Congress an appropriation of \$50,000, to be used in defraying the expenses of ' experimental tests of such automatic devices for the prevention of railroad collisions as have, in their opinion, been so perfected as to justify tests of their practical usefulness '. Doubtless the Commission will recommend that the introduction of a number of the most effective of these devices be made compulsory on all passenger-carrying roads. It will then remain to be seen whether or not public opinion will express itself with sufficient vigour to induce Congress to pass a Bill embodying these recommendations.

CONDITIONS OF LABOUR

Still another constant cause of disaster and death has been the extraordinarily long hours of labour of American railway employees, many of whom have been allowed and even compelled to work anywhere from fifteen to fifty odd hours on a stretch. The English Parliament, in 1903, gave the Board of Trade the power to regulate the hours of labour of 'railway servants'. In France the legal maximum for engineers, train dispatchers, &c., is twelve hours a day, with at least ten consecutive hours of rest at home or seven hours elsewhere. In Belgium the legal maximum for trainmen is thirteen hours, including time for meals. In Italy the maximum for engineers is thirteen hours, and for other trainmen fifteen hours. In Germany the legal maximum for trainmen is sixteen hours, with shorter hours the day preceding and the day following. It is worthy of note that, although the Bill regulating the hours of labour of railway employees, which Senator La Follette forced through the Senate, was killed in the House by railway influence, yet so strong was the pressure of public opinion on Congress that a measure reducing the maximum for trainmen to sixteen hours, and the maximum for train dispatchers and telegraph operators to thirteen hours, except in cases of emergency, when seventeen hours is made the limit, was finally adopted in conference.

Vitally connected with the question of the duration of labour is the question of its quality. Several recent accidents, such as the one at Altavista, Kansas,

January 2, 1907, when thirty-nine people were killed, have been traced to the inefficiency of mere boys holding positions of trust, involving every week the lives of thousands of passengers. In its recent report on the 'block' system, the Interstate Commerce Commission says :¹

'The facts of the accident records justify a strong presumption that American signalmen are not so carefully selected nor so well trained as those of England. The average signalman in America is young, and has had probably from six months' to two years' instruction—not systematic training—under another signalman, whose superiority to the student is due entirely to what he has learned by experience, and not at all to methodical and authoritative instruction. The average block signalman in England, on the contrary, has served as such from five to twenty-five years and has been through a long course in a signal cabin as 'booking boy', or as assistant, before being trusted with full charge of the block signals. This difference in personnel of the signalmen of the two countries undoubtedly explains in large measure the nearer approach to perfection of the block signal service in England. The fact that youth and inexperience are factors in our "failures in block working" has been repeatedly illustrated in the accident records, as given in the quarterly bulletins.'

The Commission has on file documents which contain some astonishing facts. For example, in 1906, the Louisville and Nashville Railroad was found to be employing as telegraph operators in the train service a boy fifteen years old at Pink, Alabama; two boys sixteen years old at Opp, Alabama; and a boy fourteen years old, wearing 'knee-pants', at Birmingham, Alabama.

¹ Page 14, 1907.

In view of the fact that railway dividends from 1895 to 1905 have risen from \$87,377,989 to \$308,137,924, or nearly 400 per cent, whereas the amount of stock outstanding has increased only about 30 per cent, it does not seem unfair or unreasonable to the lay mind to insist that all railway homicide, which is preventable at moderate expense, should be declared unjustifiable homicide or murder, and done away with.

REFORM MEASURES DEMANDED

It thus would seem apparent that drastic legislation is needed to secure, first, the abolition of all grade crossings in cities and towns and careful provision for the guarding of all dangerous country grade crossings by gates, flagmen, or automatic bells ; second, the universal use of the most effective safety appliances ; and third, the adoption of a series of examinations to test the ability of railway employees to meet the requirements of the service.

This programme by no means exhausts the list of needed reforms. Among many other less important ones which have been highly recommended by experts, are, first, the employment of a third man on all our monster high-speed locomotives ; second, an extension of the practice of employing two conductors on our long, high-speed trains—one to look after the running of the train exclusively, and the other to collect the tickets ; thirdly, the employment of some new and more efficacious system of notifying agents and passengers at stations of the arrival or passage of trains. In all probability the Interstate Commerce

Commission will make no recommendations to Congress relative to these minor reforms, and even if it should, such recommendations undoubtedly would get lost somehow and somewhere in the legislative shuffle. The fact is that there are many little matters in connection with railway operation—comparatively unimportant each in itself, and yet most important when taken in the aggregate—which now are being totally neglected simply because Congress cannot take the time and trouble to consider them and legislate on them in detail. In other countries it has been found necessary to put such matters in the hands of a commission, a cabinet minister, or some other executive bureau or official, specially qualified for the work and exercising ample yet carefully restricted powers conferred upon it by the national legislative body. It is to be hoped that similar powers soon will be delegated by Congress to our Interstate Commerce Commission.

THE COST OF SAFETY

It is impossible to state with any degree of accuracy just what it is going to cost to render railway travel in this country as free from accidents as it is in Europe. It will cost the railways very large sums to abolish or protect all their grade crossings, even if the expense is shared by the local authorities.

It would be a comparatively easy matter to determine the cost of the extension of the block system to the one hundred and sixty odd thousand miles of railway not at present employing it, were it not for the fact that there are so many different varieties

of block systems. But, as the Interstate Commerce Commission says :¹

‘ Like many other items in the operation of a railroad, the cost of the block system is a somewhat indefinite quantity. Few roads have introduced the system in such a way as to keep its cost separate from other expenses. Except on a new line, the significant item is the excess of cost above what was paid for train protection under the old system. Usually, the first cost of introducing the telegraph system is confined to one additional telegraph wire, say thirty dollars per mile, and a signal, say seventy-five dollars or less, at each station. On many lines the train order signal already in use for train dispatching has been made to serve satisfactorily as a block signal. The real financial burden, if any there be, is in the additional telegraph operators required, making a permanent increase in the pay-rolls. On one road on which the telegraph operators already in service managed the block signals, the increased expense for wages of operators (for additional operation) was less than 5 per cent. There are numerous examples similar to this. The cost of an additional telegraph wire is too small to receive special consideration.

‘ On the other hand, a road which erects signal cabins specially for block signals, and employs signalmen independent of its existing telegraph service, will expend \$500 each for the cabins, and from \$1,200 to \$1,500 yearly for wages, fuel, and maintenance at each. With block stations three miles apart, these items would thus aggregate \$16,666, and \$40,000 to \$50,000 respectively, for 100 miles of line. Whether the stations are three miles apart, or more or less, depends, of course, on the volume of traffic and the required frequency of trains ; so that no universal rule can be laid down.

¹ *Report of Interstate Commerce Commission on Block Signal System*, 1907, pp. 9, 10.

'In considering the installation of automatic block signals, the first financial question is the original cost of the signals, apparatus, fittings, and appliances. The cost of maintenance, while a considerable item, is decidedly smaller than the cost of operation of the non-automatic systems, in which the item of wages is large. Automatic block signals have involved expenditures of from \$1,500 to \$3,000 a mile of double-track road, the precise figure varying according to the type of signal, the number of outlying switches to be connected, and the frequency of the signals or length of the block sections. The maintenance of these signals costs variously from \$75 to \$125 per signal, per year.'

COST OF IMPROVEMENTS NOT ALL LOSS

The real question at issue, however, is not, How much capital is required to put an end to preventable railway accidents? but rather, How much of that capital will prove to be a non-remunerative investment? This distinction is of fundamental importance, for, in so far as safety appliances prove paying investments, to that extent the human lives saved by them are saved without cost to the roads.

A part of the expense incident to the carrying out of each and all of the proposed reforms, and in some cases a very large proportion of that expense, may be deducted on this score. Take the block system, for example—the most expensive of all the safety appliances demanded. After calculating the enormous increase in the traffic capacity of the roads employing it, as well as the huge yearly savings resulting from the prevention of costly accidents on those lines, most

of the roads on which it is employed have found it a paying investment in dollars as well as in lives.

While, for all these reasons, it is practically impossible to determine just what it is going to cost to attain the degree of safety demanded, at the same time there is no disputing the fact that an expenditure of many millions will be required.

WHERE THE MONEY IS TO COME FROM

One feature of the situation helps to make the financial problem much simpler and easier than it appears at first sight. However much we may wish to hurry matters, the reforms demanded can only be carried out gradually through a series of years. In the very nature of the case, the financial burden is bound to be distributed over a period of a decade or more. And, moreover, at the present rate of increase in traffic, it is a gratifying fact that the yearly increase in the net profits of the railways of the United States would more than take care of the expense to which they would be put in carrying out the proposed programme of reform.

The increase in net income of our railways from 1897 to 1907 has been over \$365,000,000, or an average of \$36,000,000 a year.¹ The increase of 1907 over 1906 was much greater than this, being somewhat over \$64,000,000. It therefore becomes strikingly apparent that, barring panics and economic depressions, the railways are entirely able to afford the expense involved

¹ During this period the increase in mileage was a little over 25 per cent, while the increase in 'net income' was over 500 per cent.

in putting a stop to all preventable accidents, without making any reduction whatever in honest dividends. Moreover, even if economic depressions should arise and interfere with this steady increase in railway profits dividends could still be paid to stockholders, and the work of safeguarding human life also could be carried out in a most thoroughgoing way, by utilizing for this purpose a portion of the yearly surplus profits of the roads. Every year since 1897 has seen a surplus averaging over \$85,000,000 placed to the credit of the railways of the country.¹ This surplus is the excess of profits which have been left over after 'operating expenses, interest, taxes, dividends, permanent improvements, deficits in operation of weak lines and miscellaneous deductions' (whatever that may mean) have all been provided for. To what better use could a portion of this surplus be put than to that of making provision for the proper safeguarding of the lives of that incredibly patient public from whom all these blessings flow?

¹ *Twentieth Statistical Report of Interstate Commerce Commission*, pp. 89, 90.

CHAPTER X

THE ULTIMATE ISSUE INVOLVED IN RAILWAY ACCIDENTS

THE widespread discussion of the question of railway accidents which has been carried on so vigorously during the past few years, has brought to light the fact that more than one-half of the accidents to travellers and employees are preventable. This discussion has made plain furthermore that the expense involved in the abolition of preventable accidents is very far from being prohibitory—that in fact this expense could be provided for out of the yearly increase in railway profits or out of the yearly surplus profits of roads, without in any way interfering with the payment of the usual honest dividends to stockholders.

Moreover, if the railways should attempt by a juggling of accounts to dispute this proposition, it might easily be shown that there is still another huge reservoir of capital available for this purpose—the ever-swelling, non-productive dead sea of railway watered stock. It would seem wiser, therefore, on the part of the railways, not to enter into any discussion or contest which would tend to drag this question into the foreground, for if ever the American people should be called upon to render a decision as to the right of financiers to coin the

bones and blood of railway victims into dividends on fictitious values, there seems to be little doubt as to the probable nature of their verdict.

HOMICIDAL ECONOMIES MUST STOP

In the face of these undeniable facts, it seems at last to have become apparent, to railway officials as well as to the public, that a continuation of the present policy of economy in railway management at the cost of human life is impossible. In the near future legislation doubtless will be enacted, requiring the introduction of some of the most successful safety appliances on all passenger-carrying roads, as well as the carrying out of other much-needed reforms, such as the abolition or effective guarding of grade crossings. But unfortunately this is very far from being all that is required. If all the patchwork reforms which have been suggested by competent experts during the past five years were to be carried into effect in the most approved way, there still would remain to be dealt with other causes of railway accidents still more complicated and deep seated. What railway managers need most desperately to-day is not greater technical competence or even better financial backing, but rather a new spirit, a change of ideals, a large increase in the *moral capital*, with which for the past few years they have been doing business.

The statement made by a Western railway official to me some years ago that 'a large percentage of our railway accidents are due to the belief on the part of the railway directors *that it costs less to pay for accidents*

than to prevent them ' is deeply significant. The fact that this remark was made with no apparent relish on his part, but pensively and solemnly as one would speak of the awful and inevitable catastrophes which result from the blind and merciless workings of the forces of nature, serves to call our attention once more to the gruesome fact that, however intelligent and humane railway officials may be personally, in their official capacity they too often become only so many cogs in a complicated and conscienceless mechanism which knows but one supreme purpose—the extraction from the public of the largest possible dividends on the largest possible quantity of watered stock. In regard to this particular category of industrial organization the Socialist undoubtedly is right, ' It is not the individual but the system which is at fault.' For this reason it becomes clear that in the work of social reconstruction which lies before us, the first practical step to be taken does not consist of that great task for the accomplishment of which 1900 years have proved all too short—the spiritual regeneration of the individual members of society—but rather of that more modest one of raising our corporate morality from the level of the hyena and the tiger up to the pitifully unsatisfactory but distinctly higher standard already attained by us as individuals.

AN APPALLING SITUATION

The whole world was astonished during the latter part of 1905 at the stories sent out from Italy by newspaper correspondents concerning the state of demoralization

in which the Italian State railways found themselves. I made a special trip from Paris to Rome in order to investigate the matter, and find out, if possible, the cause of this extraordinary situation, which reached its climax three months after the Government had taken the railways out of the hands of private companies. In Italy, on being asked, as I had been in each of the different European countries in which I had been studying the railway problem, how American railways compared with European lines, my response invariably was that, while from a social and political standpoint our railways left much to be desired, while they were tyrants in the world of business, and debauchers of our political life, that from a mechanical and economic standpoint, they probably were as good as the best in the world. What was my amazement, therefore, on arriving in this country in the autumn of 1906, to find that traffic on all the railways in the North-west was in a worse state of demoralization than it had been on the Italian lines a year before, and that in other parts of the country, while traffic was still being handled after a fashion, the generally unsatisfactory conditions of the service seemed to indicate that immediate and far-reaching reform was the only thing that could prevent a large part of our transportation system from falling into a chronic state of serious inefficiency.

Government inspectors at the Interstate Commerce Commission, men who are constantly going about examining the condition of the roads, told me that a very large number of them in all parts of the country to-day are being run in utter disregard of sound business

principles ; that any one can walk along miles of track pulling up spikes with his fingers from rotten ties ; that new and heavy engines are being put on such light rails that the wonder is they stand the strain as well as they do ; and that the road-beds have been allowed to deteriorate and become so uneven that a train going at a moderate rate of speed wobbles until it is a matter for continual surprise that it stays on the track at all. When I first heard these stories I hoped to find that they were exaggerated. But on a trip to Georgia in 1907 I found them all verified down to their smallest details, and that on one of the oldest, and formerly one of the best roads in the State, viz. the famous 'Georgia Railroad', known for half a century as the 'Old Reliable'.

A DECADENT RAILWAY

The attention of the Georgia Railroad Commission was called to the unsatisfactory condition of the 'Georgia Railroad' in a petition presented January 25, 1907, by Mr. Bowdre Phinizy, the editor and proprietor of the *Augusta Herald*. Mr. Phinizy thereupon began through the columns of his paper a campaign which he declared would not be ended until the lives of the travelling public were held to be more sacred in the State of Georgia than the swollen profits of railway corporations. Strangely enough, the Phinizy family actually owns more Georgia Railroad stock than any other single interest. It is true, as Mr. Phinizy's opponents urged, that owing to the fact that the Georgia Road since 1881 has been leased to other railway corporations which

are bound by their contract to keep the road in first-class condition, the improvements demanded by him will not cost a cent to the Phinzy interests. But at the same time it is equally true that the improvements for which he was fighting would in no way have increased the yearly rental of the road or the dividends of its stockholders. Moreover, Mr. Phinzy was not an opposition politician, striving to gain a partisan advantage by a demagogic attack on the policy of the party in power. He was recognized as being as good a Democrat as were the members of the Railway Commission, and whatever admixture of personal ambition or of desire for newspaper popularity there may have been in the motives which have inspired him, the fight he engaged in was clearly and indisputably a fight in behalf of the public safety as against the menace of private greed. Among the highly interesting facts which his attorney brought to the attention of the Commission were the following :

1. This railway during the past few years has earned a dividend of over 13 per cent on its capital stock, after paying the interest charges of \$138,000 per annum on its funded debt.

2. While from 1895 to 1905 its gross earnings increased 89.7 per cent, and its net earnings 126.9 per cent, the amount expended on maintenance of way and structures increased only 33 per cent. In other words the percentage of its gross earnings which it spent on maintenance of way and structures decreased steadily from 16 per cent in 1895 to 11.2 per cent in 1905.

3. This state of affairs was allowed to come about in spite of the rapidly growing demand for ever heavier expenditures on maintenance of way and renewal of track.

Not only did the freight tonnage and the number of passengers hauled more than double during the preceding ten years, but the weight of engines and trains increased so enormously that, as Mr. Phinizy said : ' Rails that would have borne the traffic ten years ago snap with the brittleness of glass beneath the weight of trains to-day. A road-bed that was safe and smooth and sufficient in 1895 is beset with pitfalls and hazards now.' Thus the lives of passengers and railway employees were being seriously endangered every day that the Georgia Railroad's huge engines weighing 90 tons were allowed to drag enormous trains over an unballasted track and on 65 pound rails—rails which were about $33\frac{1}{2}$ per cent lighter than those used by street-car lines in the city of Augusta.

When his petition came up for consideration, Mr. Phinizy went before the Commission with a collection of spikes which he and his attorney had pulled from rotting ties with their own hands ; with some samples of cross-ties which had reached such a stage of decomposition that they had to be brought into Court in bags, together with his own affidavit, and one by his attorney, to the effect that in two miles of track on the main line they had counted 219 ties that were ' rotten, split, or unsound '. He had a pocketful of affidavits sent to him voluntarily by people living along the Georgia Road, sustaining every statement he had made. The attorney for the road could not disprove these facts. Moreover, to make the confusion of the defence worse confounded the Georgia Railroad had a wreck or a breakdown of some sort nearly every other day during the entire period of nearly two months that the case was being contested before the Commission. The Railroad urged in its defence that, while it was true

that accidents were frequent, and that a number of employees had been mangled, killed, and even parboiled, yet up to the present time only one passenger had been killed in the entire history of the road.

The prosecution replied that it was to be hoped that the Commission would not wait until in some horrible catastrophe the road had mangled, killed, or perhaps roasted alive a score of passengers, before insisting that universally recognized principles of sound and safe management should be lived up to ; and showed that while railways all over the world are constantly putting on faster and ever faster trains, the Georgia road had only avoided a harvest of fatal accidents by following the opposite policy of lengthening out its time-tables. As an instance of this they pointed to the fact that whereas it formerly required only five hours to go from Augusta to Atlanta, it now requires six full hours even when, as is almost never the case, the train is on time.

In the light of these facts, and with the law explicitly providing that ' the Railroad Commission is hereby empowered and required upon complaint made to inspect for themselves or through an agent, the railroads or any railroad or any part of any railroad in this State, &c.,' there was nothing for the Commission to do but to order an inspection of the road.

Unfortunately for all parties concerned, however, the fight was not yet won. The road having put a few gangs of men at work replacing the rottenest ties here and there, and making a few other comparatively unimportant repairs, the so-called ' expert ', after a

very hasty and superficial examination, made a report in which its most glaring defects of management were skilfully covered over with a combination of bouquets and whitewash. This narrow and shortsighted action on the part of the railways, the Commission, and their 'expert', however, produced a result the very reverse of that expected. Intelligent people all over the State were deeply offended at this awkward attempt to throw dust in their eyes, and partially as a result of this unfortunate fiasco, the Legislature at its summer session reorganized the Commission and added two new Commissioners. It is to be hoped that this new Commission will take vigorous action to secure for the people of Georgia a greater degree of safety in railway travel.

THE HEART OF THE PROBLEM

The problem of correcting the form of abuse so strikingly exemplified by the Georgia Railroad, and which Interstate Commerce Commission Inspectors say is a widespread condition on American roads, is a much more difficult one than that of securing the introduction of a few safety appliances. Such a state of affairs indicates a deep-seated disease which we shall find it very difficult to cope with by means of mere legislative palliatives. Legislation can patch a little here, and tone up a little there, but it will hardly be able to infuse new life into a system which seems to be without any normal vitality or healthy business instincts. To be sure, the French Government has worked out a most elaborate system of legislation on this very subject, regulating very

detail of railway construction, organization, and management. Not a mile of railway is allowed to be built in France until its plans and specifications have been approved by the Government, nor can that road be operated until the Government inspectors have pronounced it safe and satisfactory. Not a locomotive is allowed to be built that does not fulfil the requirements laid down by a Government commission, nor can locomotives so built be put into active service until Government inspectors have pronounced them up to the mark. Moreover, at any hour of the day or night the Minister of Public Works or a Prefect can command a railway to take any measure which is considered necessary to insure the safe transportation of persons and property. But while in this way the French Government seems practically to have exhausted the possibilities of State railway regulation, at the same time it must be admitted that its complicated and inelastic system has proved to be not only costly but far from satisfactory.

Some such system, however, apparently will have to be worked out in the United States, unless we decide to follow the example of Germany, Belgium, Switzerland, and Italy, by embarking on a régime of Government ownership; or unless our railway directors and managers, experiencing a change of heart, can be induced to stop using the railway lines of the country as pawns in a great game of chance; or in other words unless the predatory hyenas and tigers of Wall Street can be persuaded to give up the ambitions and practices of the jungle, subject themselves once more to the galling rules and

regulations of legitimate business, and bend their untamed energies to the comparatively profitless and insipid work of providing adequate transportation facilities for the country at a reasonable remuneration.

There are in the world three generic systems of railway management; the governmental type, found in Germany, Belgium, and Switzerland, &c., where the railways are run primarily to serve the public, to build up national industries, and to advance civilization. This type has the smallest number of killed and mangled passengers and employees, for dividends are strictly a secondary consideration. The second type is to be found in England, where the roads are run primarily as a money-making proposition, but where the Government has made a strenuous effort to insure the safety of passengers and employees, and where, furthermore, railway managers realize that in order to make the roads permanent dividend-producing properties, the public must be given a reasonably satisfactory service; and where, though competition in rates exists no longer except in theory, there actually is a good deal of competition in the quality and quantity of service offered to shippers and travellers. This type has more accidents than the governmental type, but decidedly fewer than type number three, which happily seems to be found only in America. Here many of our railways are run primarily for speculative and predatory purposes, secondly for dividends, and as for the welfare of the public, the opinion of entirely too many of our railway kings on that subject was somewhat bluntly, but on the whole perhaps not so very inaccurately, expressed in

the famous and infamous phrase of William H. Vanderbilt, 'The public be damned!'

To be sure, Mr. Vanderbilt was a mere dilettante and a bungler at railway manipulation, as compared with some of our more up-to-date Wall Street artists. These distinguished luminaries of the financial firmament long ago discovered, that the legitimate dividends to be made out of railway properties are but a mere bagatelle as compared with the profits to be gained from the employment of more modern financial methods. Large dividends are sometimes useful as a basis for new issues of watered stock, but the money to be made in the way of legitimate profits comes too slowly to be at all satisfactory to men of this type of genius. Therefore, the ordinary motives which inspire mediocrity, such as the common-place sentiment of legitimate business pride and the natural desire to make ample provision for one's old age and for one's family, are quite forgotten in the mad impulse to swallow up rival railway systems, to unload large issues of watered stock, to connive and combine with other corporations and 'trusts' in limitless schemes of public plunder, for the purpose of building up those colossal fortunes which are at once the admiration of the vulgar, and the nightmare of the statesman.

Our disastrous car-famine in the North-west during the autumn of 1906, the holocaust of death-dealing accidents through which we recently have come, as well as the tendency of all our railways to concentrate into fewer, astuter, and often unworthier hands, are but symptoms all of the deep-seated dry-rot which per-

meates a large part of the corporation business of our time. Effective legislation on the subject not only is imperative, but it must come soon if we are to escape an industrial and political crisis from which may issue we know not what sort of ill-advised and sweeping attempts at social reconstruction. A reorganization of our commercial and industrial life along saner and more ethical lines is certain to be brought about in the near future. If we do not wish this forward movement to be made along the shining grooves of socialism, a concerted and vigorous effort must at once be started to direct it into more normal channels. The movement towards reform cannot be stopped. In another decade it may be even too late to guide it. This generation has in its hands a great opportunity and a great responsibility.

CHAPTER XI

EUROPEAN RAILWAY CORRUPTION

THERE seems to be no real basis for the popular assumption that more corruption is to be found in connection with Government railways than in connection with those which are managed by corporations. The fear of introducing our proverbial 'political corruption' into the sphere of railway management, which has served to array a large number of entirely honest, but not sufficiently informed people against the principle of Government ownership, is based on an imperfect acquaintance with the facts.

Whatever objections may be urged against that principle—and that there are some serious objections is only too apparent—there can be no doubt in the mind of any fair-minded man who has taken the pains to make a careful investigation of the subject, that during the past half-century there has been vastly less corruption and graft in connection with the Government railways of Belgium, Germany, and Switzerland than in connection with the private railways of England and the United States.

RUSSIAN AND ITALIAN RAILWAY CORRUPTION

While, owing to the unusual number of industrial handicaps with which Italy and Russia have had to contend, it is not to them that one should go to get

a fair idea of the normal workings of State railways, at the same time it would seem that the experience of these two countries ought not to be entirely ignored.

Apparently there has been a very considerable amount of corruption in connection with the Russian state railways. Its engineers, when tracing a line, have been known to intimate to the authorities of towns desiring stations along the new road that a cash consideration would be the most effective argument that could be employed ; frequently, also, as on our own coal-carrying roads, cars have only been furnished to shippers for a similar consideration ; while thievery of baggage and freight is said to be of as common occurrence in Russia as it formerly was on the corporation-managed lines of Italy. These facts would be more embarrassing to the advocates of Government ownership, however, were it not for the fact that the same abuses are found to exist to a like extent on the private railways of Russia.

The present Italian régime of Government railways has hardly been in operation long enough to enable us to make a satisfactory comparison of the present administration with that of the corporation management which it has superseded. And while it is entirely possible that there is more or less petty dishonesty and grafting in connection with the present system, there can be little doubt that the robbery of baggage, favouritism, and other forms of corruption, were even more frequent on the old corporation roads.

BELGIAN RAILWAY CORRUPTION

It cannot be denied that the Belgian Government has been excessively generous with the people's money, whenever it has undertaken the purchase of a line of railway.¹ To say, however, that there has been any actual graft in connection with these purchases would perhaps be putting it too strong.

While in Belgium, although I made a determined effort to discover tangible evidences of some serious forms of graft or dishonesty in connection with the State railway management, I was unable to lay my finger upon any specific instances of it. Even the Socialists, who, as irreconcilable critics of the Government, are always on the lookout for any fallings from grace on its part, could not point to any actual cases of corruption. They did, however, denounce certain practices in connection with the purchase of coal and other supplies, which seem to show a good deal of resemblance to the mismanagement involved in the Government purchase of certain railways. The Socialists attribute these reprehensible practices to the fact that Belgium has never had anything like a real democratic government—being but a monarchy tempered by plutocracy; or perhaps it might be more accurate to say, a plutocracy with a monarchical attachment. Unquestionably, in Belgium 'High Finance' is in the saddle, politically as well as industrially, and as a consequence, Belgian ministers of state always have been very loath to drive hard bargains with their associates in private life,

¹ See chapter on 'Railway Nationalization, &c.,' p. 98.

whether there has been involved the purchase of a line of railway, or of a year's supply of coal.

As the country becomes more democratic, it is highly probable that it will do away with this species of courtesy between 'gentlemen' at the expense of the State. This sort of corruption, mismanagement, or whatever one may choose to call it, is not, however, a personal affair—that is to say, the Government has not been in the habit of 'grafting' for the benefit of favoured individuals. It is, rather, a case of grafting for the benefit of a class—the moneyed class—as is our own system of a high 'protective' tariff and our numerous other forms of legislation in favour of special interests. The Belgian Government not uncommonly has taken the stand that it would not be properly 'encouraging the industries' of the country if it drove hard bargains with 'private enterprise'. It has been felt that the Government could afford to pay a good round figure for railways, as well as for supplies obtained from private corporations.

When, for example, the Socialists have come forward and shown that an immense amount of money might be saved for the Government, if, instead of buying its coal from private coal mines, whose owners constantly have united and conspired to hold up prices for Government coal, it would buy coal lands and itself mine whatever coal it needed, the Government has responded that such action, even if financially successful, was not desirable; that the coal industry was one of the most important in the kingdom, and entirely deserving of whatever encouragement it could get from the

Government. In Belgium, as in the United States, these favoured industries are always being built up, because (according to the statement of their friends) upon their prosperity depends the prosperity of the entire country.

This form of wholesale administrative favouritism can hardly be called grafting or corruption, as it is no more reprehensible than are any one of the various kinds of legislation in favour of special interests, which exist to-day in one form or another in nearly every civilized country. It is more the result of false notions of political economy, and of a narrow 'class conscious' point of view on the part of the rich, than of actual dishonesty among Government officials. In comparison with the wholesale trickery and dishonesty which have been brought to light in connection with the corporation railways of England and the United States, all that can be said against the public virtue of Belgian railway officials sounds singularly tame.

ENGLISH RAILWAY CORRUPTION

The history of English corporation railways is fairly reeking with instances of financial trickery, political knavery, and corruption of every known brand.

Perhaps the most accurate, concise description of these devious, and sometimes utterly vicious methods, is to be found in an article by the eminent individualist Mr. Herbert Spencer,¹ which was published in the October *Edinburgh Review* in 1854. He says in part :

' If, in times past, there have been ministries who spent

¹ *Essays, Moral, Political, and Esthetic*, pp. 253, 254, 255, 256, 257.

public money to secure party ends ; there are, in times present, railway boards who use the funds of the shareholders to defeat the shareholders. Nay, even in detail, the similarity is maintained. Like their prototype, joint-stock companies have their expensive election contests, managed by election committees, employing election agents ; they have their canvassing with its sundry illegitimate accompaniments ;¹ they have their occasional manufacture of fraudulent votes. And, as a general result, that class-legislation, which has been habitually charged against statesmen, is now habitually displayed in the proceedings of these trading associations : constituted though they are on purely representative principles.

‘ These last assertions will probably surprise not a few. The general public who have little or no direct interest in railway matters—who never see a railway-journal, and who skip the reports of half-yearly meetings that appear in the daily papers—are under the impression that dishonesties akin to those gigantic ones so notorious during the mania, are no longer committed. They do not forget the doings of stags and stock-jobbers and runaway directors. They remember how men-of-straw held shares amounting to £100,000 and even £200,000 ; how numerous directorates were filled by the same persons—one having a seat at twenty-three boards ; how subscription-contracts were made up with signatures bought at 10s. and 4s. each, and porters and errand-boys made themselves liable for £30,000 and £40,000 apiece. They can narrate how boards kept their books in cipher, made false registries, and refrained from recording their proceedings in minute-books ; how in one company, half a million of capital was put down to unreal names ; how in another, directors bought for account more shares than they issued, and so forced up the price ; and how in many others, they repurchased for the company their own shares, paying themselves with the depositors’ money.

¹ Akin to our recent Insurance frauds.

‘ But, though more or less aware of the iniquities that have been practised, the generality think of them solely as the accompaniments of bubble schemes. More recent enterprises they know to have been *bona fide* ones, mostly carried out by old established companies ; and knowing this, they do not suspect that in the getting-up of branch lines and extensions, there are chicaneries near akin to those of Capel Court ; and quite as disastrous in their ultimate results. . . .

‘ A history of railway management and railway intrigue, however, would quickly undeceive them. In such a history, the doings of projectors and the mysteries of the share-market would occupy less space than the analysis of the multiform dishonesties which have been committed since 1845, and the genesis of that elaborate system of tactics by which companies are betrayed into ruinous undertakings that benefit the few at the cost of the many. Such a history would not only have to detail the doings of the personage famed for “ making things pleasant ” ; nor would it have merely to add the misdeeds of his colleagues ; but it would have to describe the kindred corruptness of other railway administrations. From the published report of an investigation-committee, it would be shown how, not many years since, the directors of one of our lines allotted among themselves 15,000 new shares then at a premium in the market ; how to pay the deposits on these shares they used the company’s funds ; and how one of their number thus accommodated himself in meeting both deposits and calls to the extent of more than £80,000. We should read in it of one railway chairman who, with the secretary’s connivance, retained shares exceeding a quarter of a million in amount, intending to claim them as his allotment if they rose to a premium ; and who, as they did not do so, left them as unissued shares on the hands of the proprietors, to their vast loss. We should also read in it of directors who made loans to themselves out of the company’s floating balances at a low rate of interest, when the market rate was high ;

and who paid themselves larger salaries than those assigned : entering the difference in an obscure corner of the ledger under the head of "petty disbursements". There would be a description of the manœuvres by which a delinquent board, under impending investigation, gets a favorable committee nominated—"a whitewashing committee." There would be documents showing that the proxies enabling boards to carry contested measures, have in some cases been obtained by garbled statements ; and, again, that proxies given for a specific purpose have been used for other purposes. One of our companies would be proved to have projected a line, serving as a feeder, for which it obtained shareholders by offering a guaranteed dividend, which, though understood by the public to be unconditional, was really contingent upon a condition not likely to be fulfilled. The managers of another company would be convicted of having carried party measures by the aid of preference-shares standing in the names of station-masters ; and of being aided by the proxies of the secretary's children too young to write.

'That the corruptions here glanced at are not merely exceptional evils, but result from some deep-seated vice ramifying throughout our system of railway-government, is sufficiently proved by the simple fact, that notwithstanding the depreciation of railway-dividends produced by the extension-policy, that policy has been year after year continued. Does any tradesman, who, having enlarged his shop, finds a proportionate diminution in his rate of profits, go on, even under the stimulus of competition, making further enlargements at the risk of further diminutions ? Does any merchant, however strong his desire to take away an opponent's markets, make successive mortgages on his capital, and pay for each sum thus raised a higher interest than he gains by trading with it ? Yet this course, so absurd that no one would insult a private individual by asking him to follow it, is the course which railway-boards, at meeting after meeting, persuade their clients to pursue.

Since 1845, when the dividends of our leading lines ranged from 8 to 10 per cent, they have, notwithstanding an ever-growing traffic, fallen from 10 per cent to 5, from 8 to 4, from 9 to $3\frac{1}{4}$; and yet the system of extensions, leases, and guarantees, notoriously the cause of this, has been year by year persevered in. Is there not something needing explanation here—something more than the world is allowed to see? If there be any one to whom the broad fact of obstinate persistence in unprofitable expenditure does not alone carry the conviction that sinister influences are at work, let him read the seductive statements by which shareholders are led to authorize new projects, and then compare these with the proved results. Let him look at the estimated cost, anticipated traffic, and calculated dividend on some proposed branch line; let him observe how the proprietary before whom the scheme is laid, are induced to approve it as promising a fair return; and then let him contemplate, in the resulting depreciation of stock, the extent of their loss. Is there any avoiding the inference? Clearly, railway shareholders can never have habitually voted for new undertakings which they knew would be injurious to them. Every one knows, however, that these new undertakings have almost uniformly proved injurious to them. Obviously, therefore, railway shareholders have been continually deluded by false representations.’¹

It is clearly evident that in the history of the State railways of Belgium, Germany, and Switzerland—and even of Italy—there never has been anything in the way of corruption that is at all comparable to this monstrous record of English corporation railways.

It is only fair to add that English railways are

¹ For fuller details concerning this extraordinary condition of affairs, see *A History of English Railways*, by John Francis, vol. i, pp. 183, 189, 205, 236, 297, 298, 301; vol. ii, pp. 51, 125, 126.

managed more honestly now than they were in the days described so vividly by Mr. Spencer and Mr. Francis. But that railway influence still exerts an interested and immoral power over Parliament, not only by means of a railway lobby, but, more especially, by means of 'railway men' who have been sent to Parliament largely for that purpose, is undeniable. That as a consequence the public interest constantly is being sacrificed to the interests of directors, managers, and stockholders is equally true. While, therefore, modern English railway financiers are more artistic, less vulgar, and even less corrupt, than their predecessors, they are almost equally unscrupulous and despotic as is shown by the determined and entirely illegitimate grip which they retain on Parliament, as well as by their steadfast refusal to gather and make public, detailed statistics as to the methods and results of railway operations in the British Empire.

PRUSSIAN RAILWAY CORRUPTION

Although I have made diligent search for evidences of some form of graft or corruption in connection with the State railways of Prussia, so far these efforts have been unsuccessful. Practically all the railway authorities in different parts of the world who have been questioned as to this matter have agreed that such a search was vain, for the simple reason that no graft or corruption is to be found on Prussian railways.

Mr. B. H. Meyer, probably the ablest railway authority in America, who combines the position of Professor of Railway Economics at the University of

Wisconsin with that of Chairman of the Wisconsin Railroad Commission, says :¹

‘ In the invidious American sense of the word, the Prussian railways are most emphatically not in politics. There are no paid lobbyists, no subsidized newspapers, no partisan publication bureaus, no “ rake-offs ”. I have been able to discover only one instance of dishonesty and faithlessness ; and that was a case of a subordinate employee who had appropriated railway scrap to his own uses. The case was tried only a few months ago. The man was sentenced to the penitentiary for a term of five years. Who would venture to say what would happen if the books of the American railway companies were to be subjected to the tests of the Prussian, with the same consequences in the courts ? In all the testimony taken before the Senate Committee on Interstate Commerce, I do not remember having seen a single statement something like this :

Question : Mr. ———, does your road discriminate ?

Answer : No, sir.

Question : Mr. ———, do you pay rebates ?

Answer : No. And I wish to say to you, Senators, that if you desire to convince yourselves of the truth of my statements, I cordially invite you to appoint expert accountants to investigate the books of my company.

‘ With all due respect to our railway officials, I cannot help wondering why it is that not one of the many witnesses ever thought of making this suggestion, in order to set at rest this vexing question. There is still time to volunteer before Congress gets through with the consideration of railway legislation.’

This freedom from dishonesty in connection with the management of the Prussian State railways might

¹ *Journal of Political Economy*, February 1906, pp. 94, 95.

readily be attributed to the native honesty of the Germans as a race, but for the fact that such a hypothesis can be too easily disproved by the institution of a comparison between the amount of corruption to be found in connection with German private enterprise on the one hand, and German State enterprise on the other. Anomalous and even incredible as it may seem to those whose economic theories would lead them to expect the contrary, the German *State* railway administrations have been strikingly free from any taint of graft or dishonesty, whereas a number of German *private* banking institutions have vied with some of our American devotees of frenzied finance in their efforts to 'get rich quick' at any cost. The following bit of recent German financial history abundantly bears out this statement.

THE GERMAN FINANCIAL CRISIS OF 1900 AND 1901

As the collapse of the Morse-Heinze group of banks was due to the collapse of the copper combinations, so, in Germany, the industrial crisis of 1901 and 1902 was caused by the suspension and subsequent failure of the Leipziger Bank on June 25, 1901. Whatever may have been the more fundamental causes of this German crisis, there can be no doubt that, in the case of the above-named bank, the personal equation of the directorate played an important part in bringing about its downfall. This bank was one of the oldest in Saxony, having been founded in 1838, and its paid-in capital in 1898 amounted to 48,000,000 marks, or approximately \$12,000,000. Its dividends, during the

preceding decade, were between 6 and 10 per cent ; while for the year 1900 a dividend of 9 per cent was declared. Its shares in 1900 were quoted at over 190, and even in 1901 at far above par. It had branches in Dresden, in Chemnitz, and in three other smaller towns in Saxony. It had close financial connections with the Saxon Government, which, through its lottery administration, extended its own credit to the bank by taking as security notes of outsiders which the bank had endorsed. The collapse of this bank was due to its connection with the so-called ' Aktiengesellschaft für Trebertrocknung in Kassel ' (stock company for desiccated lees) and its subsidiary companies—the engagements of the Leipziger Bank, in connection with this industrial concern on the day of its failure, amounting to over 93,000,000 marks, or approximately \$23,250,000.

Whereas during the first few years the financial relations between these two concerns could hardly be criticized as legally improper, there is no doubt that after 1899 the directors of the bank knew of the speculative character of the industrial concern which they financed, and consequently were guilty of culpable methods in deceiving both the controlling authorities and the public at large about its true relations with this huge corporation. Dr. Felix Hecht, in his report to the meeting of the Verein für Socialpolitik, states plainly that the principal reason that the leading director of the bank consented to extend such unexampled and limitless credit to the concern in question was the desire for quick and large earnings. But this

was only the beginning. After the bank had practically identified its fate with that of the concern for which it stood sponsor, questionable methods soon turned to criminal methods of false book entries, untrue balance-sheets, and similar devices.

This case of the Leipziger Bank, while undoubtedly disclosing a degree of commercial corruption uneclipsed in the annals of German banking, and closely resembling the worst examples of recent American financial operations, is not, however, an isolated or unrepresentative instance of corrupt business methods as displayed by German financiers. As early as 1900, great excitement and consternation was spread among German investors and bankers by the suspension of several land banks, notably the Pommersche Hypotheken-Aktien-Bank (Pommeranian Landbank, Limited) at Berlin, and the Mecklenburg-Strelitzsche Hypotheken-Bank (M.-S. Landbank, Limited) closely allied with the former. The results of these failures and similar earlier troubles, in the case of the now defunct 'Deutsche Grundschuld-Bank' (German Land-Mortgage Bank) and the 'Preussische Hypothekenaktienbank' (Prussian Land-Mortgage Bank, Limited) was the discovery of serious abuses on the part of directors and managers vested with fiduciary powers. It was proved that the managers had violated the law of the land, as well as the charters of their banks, by issuing mortgage bonds to borrowers, on property of insufficient value, and by using the funds of the society for private speculative dealings, in no way connected with the normal business of the institution. Among the charges

which were proven against the directors of the Pommeranian Land Bank was that of founding subsidiary banks in order to hide risky speculative undertakings, which are not tolerated by the Prussian law. The Directors of the Prussian Land Bank, Limited, were accused of falsifying on a grand scale the balance-sheets for a number of years.

In the case of the other banks, which had to suspend during the critical period, crafty methods of book-keeping for the purpose of hiding the financial relations of the bank with their leading spirits (the directors), or actual losses resulting from their speculative dealings, were proven in a large number of cases, as, for instance, in the case of the Rheinau concern in Mannheim and several provincial banks in the Rhein province.¹

It is a matter for congratulation that no scandals of this nature ever have been hinted at in connection with the Government railway administrations of any of the German states.

SWISS RAILWAY CORRUPTION

One is perfectly safe in saying that in connection with Swiss Government railways, there exists no such thing as graft in any of its grosser forms. Unquestionably, Swiss railway officials are human, but, just as unquestionably the railway administration which they

¹ For fuller details as to this matter see Raffalovich's *Marché Financier*, 1901-2, *Schriften des Vereins für Socialpolitik*, Nos. cix-cxiii, particularly Dr. Felix Hecht: 'Die Katastrophe der Leipziger Bank', in No. cix of the *Schriften*, pp. 373-89; *Ibid.* 'Die Katastrophe des Rheinaukonzerns in Mannheim', in No. cxi, pp. 289-305; and 'Volkswirtschaftliche Chronik', 1901, appended to Conrad's *Jahrbücher für Nationalökonomie und Statistik*.

are giving their country is as honest and free from any taint of corruption as is any business enterprise of equal magnitude in any part of the world. This, however, it is only fair to state, is due not so much to the perfection of the machinery of their Civil Service, which in some ways is inferior to that of Prussia, as to *the Swiss standard of political morality*, which probably is the highest to be found in any part of the globe.

Even when Swiss railways were in corporation hands there was surprisingly little graft, and probably there is less at the present time. What little corruption existed in connection with the old private railways was so frowned upon and so ruthlessly stamped out, that it had little chance of getting a foothold anywhere. An instance in point was related to Professor Frank Parsons by Professor Borgeau of the University of Geneva. 'The vote of the Canton of Vaud,'¹ he said, 'was necessary to the fusion of the "Jura Berne" and the "Swiss Occidentale" under the Simplon Company. The canton owned a lot of the railway shares, and nothing could be done without its vote. M. Vesser, a man of great political influence, was offered an option on a block of stock if he would carry the measure. The offer was worth about 30,000 francs to him. He took it and carried the Bill, which apparently was not against the public interest, anyway. The bribe became known, and within three days M. Vesser had to resign his office, a result "brought about by the moral pressure of his friends and the public and by the bombardment of the press, the papers of his own party joining in the attack".'

¹ *The Railways, the Trusts, and the People*, p. 357, footnote.

While in Lausanne the same story was related to me, together with the additional fact that M. Vesser also had been promptly 'cut' by most of his best friends, who declared that such an action on his part was unworthy of a gentleman and a citizen.

While the advantages of a good system of Civil Service examinations are manifold, at the same time *no system or mechanism can take the place of a healthy and sensitive public conscience*, which can be relied upon to be as spontaneous and as strenuous in its condemnation of crookedness in positions of public trust, as it is of crime or dishonour in the more intimate affairs of private life.

CHAPTER XII

AMERICAN RAILWAY CORRUPTION

IN order to gain a detailed understanding of the undesirable practices of corporation railways, one need not go abroad. For three-quarters of a century America has furnished a sufficient variety of easily verifiable instances of indefensible methods of railway management to satisfy every possible demand—and the end is not yet.

In order to avoid the confusion which might otherwise arise from this extraordinary profusion of data, a number of varieties of American railway graft will have to be dealt with separately.

COMMERCIAL RAILWAY CORRUPTION

To give any adequate account of past and present rate discrimination among American railways would require at least as much space as that which the late Professor Frank Parsons has devoted to it in his authoritative treatise, *The Heart of the Railroad Problem*.

Perhaps the most noted, as well as the most striking instances of this form of corruption were the discriminations practised in favour of the Standard Oil Company, which Mr. Henry D. Lloyd was the first to bring to public notice. The roads made a secret contract with the South Improvement Company, as the Standard Oil Company was then called, to the effect that they

were to double the freight rates on all oil transported for other shippers, but were not to alter the rates charged the Standard Oil Company. The most extraordinary part of this secret contract was the clause providing that the roads were not to retain the increase in profits caused by this doubling of rates, but were to pour them all into the treasury of the South Improvement Company.¹ For a more exhaustive and up-to-date account of railway discrimination in favour of this particular giant corporation, we now have the report of the Commissioner of Corporations on the 'Transportation of Petroleum' a volume of over 500 pages, which was published by the Government in May 1906.

There seems to be a very general feeling on the part of the public that railway discrimination has now become a thing of the past. But unfortunately this is not the case. It is true that the riot of discrimination and favouritism which prevailed before the passage of the Hepburn Bill no longer exists. But in its two last reports the Commission has made clear that the practice of discrimination has by no means been entirely stamped out. In its Twenty-first Annual Report, for the year 1907, the Commission enumerates eight different methods of evading the law against discrimination, still being employed by the roads,² and in the Twenty-second Annual Report, for the year 1908, while the matter is gone into in less detail, the Commission says,³ among

¹ *Wealth against Commonwealth*, chapter v.

² Pages 106, 107.

³ Page 25.

other things, that, ' It still remains true, however, that many shippers enjoy illegal advantages.'

As an illustration of the practical difficulties encountered by the Commission in its efforts to make ' practical men ' conform to the law against discriminations, the following testimony¹ of Commissioner Prouty is illuminating :

' MR. PROUTY. In respect to the compelling an observance of the published schedules, and a prevention of rebates, there are just two things we can do. We can, of course, go out and ferret out testimony. We can not do that personally, but we can employ agents to do it. We can hold investigations. We can put these traffic men on the stand ; we can ask them to produce their books and their papers, and we can turn the evidence which we obtain in to the Attorney-General. Now, while the act says that the district attorney shall prosecute under our direction, if you read it carefully it comes to this : That all we can do is to pass over to the Department of Justice the evidence which we obtain.

' When I first came onto the Interstate Commerce Commission, I used to see continually in the newspapers statements like these : " Rates sadly demoralized," " Agreement between railroad officers to restore rates," and everything of that sort. I said to my associates, " Gentlemen, this thing will not do ; we must stop the payment of these rebates." They said, " How are you going to stop the payment of the rebates ? " I said, " We are going to call these gentlemen before us ; we are going to put them under oath, and we are going to make them admit they paid these rebates, and we are going to use the evidence which we obtain to convict them." We employed Mr. Day, who is now with the Department of Justice. The rates which have been almost uniformly demoralized* have been the grain

¹ *Senate Committee Hearings*, 1905, pp. 2899-2901, 2911, 2912-3.

rates from Chicago to the Atlantic seaboard. We called in the chief traffic officials of all these lines and we put them under oath. Now, I would ask these gentlemen, "Are you the chief traffic official of this road?" "I am." "Would you know it if a rebate was paid?" "I would." "Are there any rebates paid on your road?" "There are none." "The rates are absolutely maintained?" "They are."

'Well, every traffic official who came before us in that capacity—and we prosecuted it for three days at Chicago—testified that rates were absolutely maintained.

'Senator NEWLANDS. How many did you have before you?

'Mr. PROUTY. We had the official of every trunk line leading from Chicago to New York.

'Senator NEWLANDS. Did you have the officials of the lines west of Chicago?

'Mr. PROUTY. Not at that time.

'Senator NEWLANDS. I understand that most of the rebates were there.

'Mr. PROUTY. I do not know whether they were or not. Now, they all testified the rates were absolutely maintained from Chicago to New York. Two years after that I examined the chief traffic officer of the Baltimore and Ohio, and of the New York Central—do not think it was the same man in either case—and of the other lines, and they all testified that rates had never been maintained. I would like to know what I could do as Interstate Commerce Commissioner to make those gentlemen admit that they paid rebates, and, as they would not tell that they paid rebates, I would be glad to know how I could obtain evidence that they did.

'Having gotten through, Senator, with the lines between Chicago and New York, we said perhaps this is not a fair sample. Now, we will go up in the North-west, and we will take the lines that carry flour from Minneapolis east. We instituted another investigation, and we went up into the North-west, and we put the railroad and the traffic men

of the millers on the stand, and they all swore without exception that the rates were absolutely maintained. One traffic official there, when it got a little bit hot for him, became sick enough so that he threw up his dinner, but he did not throw up the truth. We could not get the admission from any man there that they had ever paid a rebate. We said, "This does for the East; now let us go West." So we went into the Pacific coast, to Portland, Oreg., and went over exactly the same performance there. We made one man admit that he burned up his books rather than present them to the Interstate Commerce Commission, but we could obtain no admission of the payment of any rebate there. "Well," we said, "gentlemen, this is a farce. This makes light of serious matters. We will not proceed further in this direction."

' Now, it so happened that there was a traffic association in the South-west, called the St. Louis South-western Traffic Committee, or traffic association. It has had a great many different names, and I do not remember the exact name under which it went at that time. This traffic association incorporated in the articles of association the provision that officers of that association should, if possible, obtain evidence of the payment of rebates and present that evidence to the Interstate Commerce Commission. They hired a young gentleman by the name of Camden, and put him at the head of the association. They not only made him subscribe to the articles of association, but they put him under oath, and compelled him to swear that he would observe that provision to lay before the Interstate Commerce Commission any evidence that he got. He had not been there more than two or three weeks before he found some evidence to the effect that the Baltimore and Ohio Railroad had been departing from the published rate. He supposed his oath meant something, and he came up to Washington and laid that evidence before the Interstate Commerce Commission, and we began proceedings against the Baltimore and Ohio Railroad.

‘ Now, that was the first instance from the time I came onto the Commission that we could obtain any evidence of a departure from the published rate.

‘ Senator NEWLANDS. Then what happened ?

‘ Mr. PROUTY. I am going to tell you what we did then. We directed the Baltimore and Ohio road to file a statement showing what shipments they had made during a certain time, and the rate of freight paid them for the transportation. It was necessary to do that in order to connect up with the evidence that we had. Thereupon they filed a statement showing a great many departures from the published rate. At the same time they sent to the Interstate Commerce Commission a letter. They said in that letter—now, I repeat from memory ; I may get it a little wrong—but they said, in substance, in that letter, that the roads in the territory in which they operated had habitually departed from the published rate ; that was after they had sworn they maintained the published rate in that territory : “ Now, for us, the receivers of the Baltimore and Ohio, we have gotten through, but we can not maintain the rate unless our competitors maintain the rate. We propose from this time on to maintain the rate ourselves, and we propose to see that they maintain it ; but in order that we may do that, we ask you to call a conference of the railroad presidents in trunk-line territory.”

‘ Now, the Commission did, acting on that suggestion, invite every president of the trunk-line railroads to come to Washington. They came, all of them. Mr. Calloway was there for the New York Central ; Mr. Thompson was there for the Pennsylvania Railroad ; Mr. Murray and Mr. Cowan came there for the Baltimore and Ohio ; Mr. Harris came for the Philadelphia and Reading, and Mr. Walters was there for the Lehigh Valley. I do not remember them all, but they all came there. Those gentlemen all said : ‘ It is true ; we have departed from the published rate. We did not like to do it, but we did. But we have gotten through. We shall depart from the pub-

lished rate no more. If you gentlemen will only let bygones be bygones, we assure you that in the future there will be no discrimination under this law."

' Well, I expect, perhaps, that we ought to have said to them, ' You are a pack of consummate liars ; we do not believe anything you say, and we will prosecute you if we can.' But we did not think so ; we believed exactly what they said, and we told them we did, and they went home and no prosecutions were begun on the facts which we had against the Baltimore and Ohio. Then we called, at the request of certain persons in the West, the presidents of all those lines, and they all came. Mr. Marvin Hewitt came ; Mr. Bird, of the Milwaukee line, came ; in all, 30 or 40 ; and we had the same sort of an experience meeting again. They all said : " We have sinned, but we have got through. Now, gentlemen, just help us to maintain the act to regulate commerce." We said : " We will do it." And they went home.

' Now, I do not wish to pass any criticism at all on these gentlemen. I have not the slightest doubt that they meant precisely what they said. I think I know something about the difficulties under which they laboured ; but they did not maintain those rates for a month, probably. The thing went along in that way until the fall of the year 1901, or about one year after this first meeting with the presidents. We then obtained evidence of a departure from the published rate in the transportation of packing-house products and grain. They wanted to say once more : " We will stop if you will let us go." But we said : " No, gentlemen, we have heard this story once," and went to the court and obtained injunctions against these roads, because of departure from the published tariff. We passed the evidence which we had over to the Department of Justice.

.
' Senator NEWLANDS. It is contended by the representatives of the carriers here that the rebate must show in some form or another, and it is contended, as I understand it,

that if the Commission had exercised its powers of investigation and not simply contented itself with the examination of the traffic managers it would have gotten evidence of these rebates. Now, how about that ?

‘ Mr. PROUTY. Now, it may be that we could have shown in some way that those gentlemen were not telling the truth. It is possible we might have done so. But, in my judgment, it would have amounted to nothing to examine their books unless you had the power to prescribe the method in which those books should be kept. We did examine their books. We ordered books brought into court. We ordered them to file the fullest statements. We spent a week in the examination of their books and movement of traffic, and everything of that sort.

‘ Senator NEWLANDS. With the view of discovering rebates ?

‘ Mr. PROUTY. Yes, sir.

‘ Senator NEWLANDS. And you could not ascertain anything from them ?

‘ Mr. PROUTY. No, sir ; I desire to say that there has been no time since I became an Interstate Commerce Commissioner when if any strong trunk line operating between Chicago and New York had said, “ We will pay no more rebates ourselves and we will not suffer our competitors to pay rebates,” the payment of rebates in that section would not have stopped. It might have cost the railway something, but rebates would have ceased. Nor has there been a time since I have been an Interstate Commerce Commissioner when if the traffic officers of the trunk lines between Chicago and the Atlantic seaboard would have consented to tell the truth under oath, the Interstate Commerce Commission would not have stopped the payment of rebates. I have been able to discover no way in which to make them tell the truth.’

¹ ‘ Senator NEWLANDS. What do you regard the greatest

¹ *Senate Committee Hearings*, 1905, pp. 2912-13.

evil in connection with transportation—this question of rebates or this question of discrimination under the published tariff as between localities ?

‘Mr. PROUTY. In the past the rebates have been the most serious question. My own opinion is that in the future the discrimination in the tariff itself will be the most serious question. Go into New England to-day, and you will find that the tariff puts absolutely into the possession of the Standard Oil Company every foot of the territory of the New York, New Haven, and Hartford Railroad. You will find that class of discrimination all through this country. I think in the future that class of discrimination will probably be more serious than the question of rebates. That is really not a discrimination against localities. That is discrimination as between shippers. That is the adjustment of a tariff in such a way as to prefer one shipper to another.

‘Senator NEWLANDS. Do you think there is any great danger from the fact that men who are largely interested in these great industrial corporations control certain railway lines ?

‘Mr. PROUTY. I do regard that as the very gravest danger.’

À propos of present-day rebating, President A. B. Stickney, of the Chicago Great Western Railroad, has recently been quoted as saying :¹

‘I think you are correct in supposing that the “secret rates to favoured shippers” as formerly practised have practically disappeared, but as a matter of fact the former method of making such secret rates is the only part of them which has disappeared. Many rates which are concealed in the verbiage of the 500 or 600 tariffs which are filed with you daily are really more secret than the former “secret rates”, although they may be technically published.

¹ *Boston Transcript*, August 10, 1909.

'I have recently read a publication put out by the La Salle University Extension of Chicago, written by one Mr. Ketcham, who is the director of some freight shippers' association in Chicago, in which he publishes a long list of such rates, which are available only to large concerns which can afford to hire competent men to study the classification and schedules which are put out and filed with the Commission from day to day.

'He estimates that more than \$100,000,000 annually is being paid out by smaller shippers in excess of the legal rate, if the rates were published in such a way that they could find out what the real rates are. It is a wonderful exposé, and is being sent out by the University Extension to its numerous correspondence pupils over the country, and will sooner or later bear fruit in the judgment of the people. The Commission certainly cannot be unmindful of the practice of paying claims to large shippers for overcharges and loss and damages on presentation, provided they do not amount in the aggregate to more than a certain percentage of the freight bills paid by such shippers.

'I think Albert Moore, special master in the Great Western foreclosure case, called your attention to this at one time by letter, which did not seem to meet with any great response from the Commission. I assume the Commission also understands that wherever a commodity rate is published, a classified rate on the same article is also published, and in the majority of cases only those shippers for whom the commodity rate was made understand such a rate exists, while the other shippers pay the higher rate by classification to which such commodity belongs. Some years ago I fear I made myself something of a nuisance to the Commission by calling its attention frequently to this condition and urging uniform classification and the abolishment of commodity rates, so that there should be only one rate. In my opinion until this is accomplished large shippers will continue to get secret rates which have been published and filed with the Commission.'

FINANCIAL RAILWAY CORRUPTION

A large volume could easily be written likewise on that form of financial railway corruption in America known as 'stock watering'. Without going into the subject in detail, the following instances of it can be mentioned as samples :

'According to the report of the Industrial Commission, the original Southern Pacific cost actually only \$6,500,000, although it is a matter of record that \$15,000,000 was paid to the construction company, and the bankers' syndicate which financed the road received \$40,000,000 in securities, or an average of \$6 in bonds or stocks for each dollar of actual cost.'¹

A more recent case is that mentioned by Mr. Will Payne :²

'In 1902,' he says, 'the Messrs. Moore and their friends bought up \$70,000,000 in round numbers, of the stock of the Chicago, Rock Island and Pacific, which had paid from two to three and a half per cent a year in dividends through hard times. By the simple devices of a lease and a holding company, they converted this \$70,000,000 of Rock Island into—

\$70,000,000	4%	Bonds
\$49,000,000	4%	Preferred Stock
\$70,000,000		Common Stock

\$189,000,000, without adding a single dollar to the actual investment in the road itself.'

A striking instance of the variety of financial crookedness known as 'stock manipulation', is the case of the

¹ *American Railway Transportation*, Emory R. Johnson, p. 88.

² *Everybody's Magazine*, July 1907.

Chicago and Alton Railroad. Says Interstate Commerce Commissioner Franklin Lane : ¹

‘ It developed during the inquiry that the Union Pacific Railroad Company in the year 1903 became the owner of 103,431 shares of the preferred stock of the Chicago and Alton Railway Company ; and the Commission therefore deemed it important to inquire into the reorganization and capitalization of this company.

‘ Prior to 1898 the Alton road had been for many years under the control of Mr. T. B. Blackstone, as President, and had paid an average dividend exceeding 8 per cent per annum, and in addition had expended large sums out of earnings in the improvement of its property.

‘ As appeared by its books on December 31, 1898—

	<i>Dollars</i>
The cost of its road and equipment was . . .	34,153,927
It had other assets amounting to . . .	5,781,960
Making the total value of its property . . .	<u>39,935,887</u>
Its total stock outstanding was . . .	22,230,600
Its total funded debt . . .	10,779,850
Its other liabilities were . . .	940,957
	<u>33,951,407</u>

‘ About this time Mr. Edward H. Harriman, Mr. Mortimer L. Schiff (representing Mr. Jacob H. Schiff), Mr. George J. Gould, and Mr. James Stillman formed a syndicate to buy this stock, and bought it for \$200 a share for the preferred, and \$175 a share for the common, making the total cost of the shares purchased \$39,042,200.

‘ In about seven years, to June 30, 1906, the outstanding capital indebtedness of this company was expanded from \$33,951,407 to \$114,610,937, or an increase of about \$80,660,000, and there was expended in actual improvements and additions to the property out of this capitalization

¹ *Interstate Commerce Commission Report on ‘Consolidations and Combinations of Carriers,’* pp. 337-8, 342-3, 345.

only about \$18,000,000, leaving an increase of its stock and liabilities, without one dollar of consideration, of about \$62,660,000, or \$66,190 per mile on the 946.66 miles of road owned by the company on June 30, 1906.

‘ It was admitted by Mr. Harriman that there was about sixty millions of stock and liabilities issued against which no property had been acquired, and this is undoubtedly an accurate estimate. It further appears by the testimony of Mr. Hillard that since the Harriman control has ended and the road was turned over to the Rock Island, the company has been compelled to issue \$2,260,000 of car trust notes to acquire equipment needed in the business of the company; that the present management found the company without any money to buy necessary equipment, or to build 34 miles of railroad which the company had contemplated constructing and on which the Harriman management had placed a mortgage, sold the bonds, but had left no funds in the treasury to complete.

INDEFENSIBLE FINANCING

‘ From this brief synopsis of the exploitation of the Chicago and Alton, it is evident that its history is rich in illustrations of various methods of indefensible financing. First came the profit to the stockholders arising out of the sale to themselves of \$32,000,000 of bonds at 65, which sold for several succeeding years for 82½ to 94. Second came the 30 per cent dividend based on amounts expended from income for improvements, much of it nearly thirty years before, and recently capitalized. Third came the pseudo transfer to Stanton, and his contract under which the new company paid \$10,000,000 in cash for preferred stock which had cost less than \$7,000,000. Fourth came the conversion of 183,224 shares of common stock in the *Railroad Company* into 195,428 shares of common stock plus 194,890 shares of the preferred stock in the *Railway*

Company, part of which was sold to the Union Pacific at 86½ a share. Fifth came the sale of the St. Louis, Peoria and Northern for \$3,000,000 cash. Sixth came whatever interest the syndicate may have had in the sale to Kuhn, Loeb & Co. of \$22,000,000 of bonds at 60 cents on the dollar. Seventh came the fee of \$100,000 to Mr. Harriman for financing the enterprise. This analysis is no doubt incomplete, but it is suggestive.

‘Incidentally, it may be observed that the bankers who manage these operations appear to be richly rewarded. The testimony shows that Kuhn, Loeb & Co. received 5 per cent, or five millions of dollars, on the \$100,000,000 of Union Pacific convertible bonds above mentioned, one-half of which was retained by them and the other half given to the syndicate to whom the bonds were sold. On the 750,000 shares of Southern Pacific which the Union Pacific purchased at \$50.61 per share, the same banking house received a commission of \$2.50 a share. They received a like commission of \$2.50 per share on the Chicago and Alton stock sold to the Union Pacific at \$86.50 per share. It is significant that a member of this firm refused to disclose the extent of its interest in these securities.’

Speaking of this sort of financiering, Mr. Albert Shaw recently said :¹

‘(Plight of the Small Investor). The ordinary stockholder in the railroad is just as helpless as the unfavored shipper of freight. A great game of railroad strategy has been going on in Wall Street for years past, and one of its principal objects has been to freeze the small investor out, and to concentrate the actual ownership as well as the control of the railroads in a few hands. Thus the most conspicuous achievement of our boasted railroad system

¹ *Review of Reviews*, February 1907, ‘The Progress of the World.’

within the past few years has been the making of a group of multi-millionaires who have rendered little, if any, return to the stockholders or to the country for their vast acquisitions of wealth and power. They have juggled with securities, have played the stock market up and down, have played tricks with their dividend policies, have so falsified their bookkeeping as to conceal surpluses, and have virtually confiscated the property of the confiding stockholders by the use they have made of the proxies which they themselves have solicited through the mails, at the stockholders' expense.'

ADMINISTRATION GRAFT

Perhaps the most striking instance of administrative graft that has been brought to light by the Interstate Commerce Commission during the past few years, was in connection with the famous Pennsylvania Railroad, long held up as a model among American railway corporations. In accordance with a joint resolution of Congress, March 7, 1906, the Interstate Commerce Commission took some 6,629 pages of evidence, between April 10 and June 22, 1906, on the subject of 'Railway Discriminations and Monopolies in Coal and Oil'. On January 25, 1907, the Commission transmitted to Congress an eighty-one page *résumé* of this evidence, of which the following is an excellent condensation :¹

'An official of a coal company,' says Mr. Haines, 'admitted to having distributed 700 shares in his company, valued at \$35,000, to four railroad employees—a superintendent, a train master, a car distributor, and a clerk in the office of the superintendent of motive power. He explained that he gave away this stock to increase his facilities for doing business. A certain general superintendent had been given

¹ *Railway Corporations as Public Servants*, Henry S. Haines, pp. 81-2.

1,300 shares in seven different companies that paid dividends of 12 to 20 per cent. One of the superintendents admitted having received in this way stock valued at \$40,000. A train master was in receipt of an annual income of \$30,000 from coal stocks, and a road foreman in the locomotive department of \$18,000. A more prominent official possessed stock valued at \$307,000 for which he had paid nothing, and his clerk had shared in the same distribution to the extent of \$38,000. A station agent at one mine had received stock valued at \$67,000. A clerk on a salary of \$125 a month had purchased stock of the par value of \$75,000.

‘That favors from railroad officials were not too dearly purchased at such prices was shown in the results to one coal company, which in ten years, had made a profit of 1,656 per cent. The five coal companies specially selected for such favours profited at the expense of their rivals. One of these testified that, during a period of unusually high prices for coal, when he could have used 60 cars a day, his supply was nearly cut off, while one of the favored companies was not only receiving 500 cars daily, but also had a reserve of 200 cars kept idle to provide for any accidental obstruction of its regular supply. He then bought 150 cars for his own business, but the car distributor included his private stock in the general distribution, although the 6,000 cars of his competitor were kept out of that distribution. Another operator, who in 1900 had shipped 130,000 tons of coal, was only able to ship 3,000 tons a month in 1904. He was forced to rent cars at 6 cents a ton from a coal company in which the railroad officials were interested, and eventually made an arrangement with the company to operate his mines for one-third of the profit.

‘In the Board of Directors of one of these (railroad) companies, it was proposed to discharge every official and employee who had been engaged in these practices, when the board was informed that, if such a resolution were

strictly enforced, the transportation department would be so thoroughly disorganized that the business of the Company would be paralyzed.

‘This graft was not in the traffic department, but in the transportation department, which controlled the distribution of coal cars to the mines.’

Speaking of railway discriminations between individuals, Mr. Haines further says :¹

‘It has been estimated by experienced railroad managers that the tribute paid in this way to individual shippers might amount to anywhere from \$50,000,000 to \$100,000,000 per annum.’

RAILWAY INFLUENCE WITH THE JUDICIARY

Attempts at judicial corruption by means of passes and political support or political antagonism, are so common as to be thought little of, except when carried on more openly and blatantly than usual.

An extraordinary instance of this sort of thing came before the author’s own observation. A member of the Supreme Court of Kansas, Justice David Martin, a silver republican, since deceased, had allowed his name to be brought up for renomination by the Democrats and Populists in 1900. At a conference of State central committee-men and other leading State politicians of both parties, the different candidates for the different State offices were being discussed. When the question of renominating Justice Martin was brought before the meeting, a railway attorney, calling himself a Democrat, arose to urge that it would be the sheerest folly to renominate Justice Martin, for ‘if he should be re-

¹ *Railway Corporations as Public Servants*, Henry S. Haines, p. 75.

nominated he said, the railroads would spend \$50,000, if necessary, to defeat him '. The best lawyers in Kansas, of all political parties, recognized that Justice Martin had made an eminently fair Supreme Court judge, and was in many ways the most learned lawyer on the bench of his State. He had never taken any radical or revolutionary stand on any questions involving railway polity. In the minds of certain railway managers and lobbyists, he had, however, one fatal defect of character—he was honest, and could be counted upon to interpret the law without fear or favour. He had refused to bow to the will of the railways, and consequently they had decreed that he should be politically destroyed.

The following story is related by Ex-Governor Larrabee, of Iowa, concerning the effect which passes are supposed to exert on the Judiciary.¹

' A railroad pass, when presented by a public official or even by any public man, is now, in nine cases out of ten, a certificate of dishonour and a token of servility, and is so recognized by railroad officials. What equivalent railroad companies expect for the pass "courtesy" is well illustrated by the experience of an Iowa judge. This gentleman, who had been on the bench for years and always had been favored with passes by the various companies operating lines in his district, at the beginning of a new year failed to receive the customary pass from a leading road. Meeting its chief attorney, he took occasion to call his attention to what he supposed to have been an oversight on the part of the officer charged with the distribution of the passes. The attorney seemed to take in the situation at once. "Judge," said he, "did you not recently decide an impor-

¹ *The Railroad Problem*, 1893, pp. 208-9.

tant case against our company ? ” “ And was my decision,” replied the judge, “ not in accordance with law as well as with justice ? ” The attorney did not answer this question, but in the course of a few days the judge received the desired pass. A few months later it again became the judge’s unpleasant duty to render a decision adverse to the same company. This second act of judicial independence was not forgiven, and the next time he presented his pass it was unceremoniously taken up by the conductor in the presence of a large number of passengers, and he was required to pay his fare.’

‘ That it has always been the policy of railroad managers to propitiate the judiciary is a fact too generally known among public men to admit of contradiction. If a judge owes his nomination or election to railroad influences, railroad managers feel that they have in this a guarantee of loyalty. If, however, he acquires the ermine in spite of railroad opposition, every effort is made to conciliate the new dispenser of the laws. The bestowal of unusual favors, flattery, simulated friendship and a thousand other strategies are brought into requisition to capture the wayward jurist. If he proves docile, if his decisions improve with time and show a gradual appreciation of the particular sacredness of corporate rights, the railroad manager will even forgive him his former heresy and rally to his support in the future. But if he asserts his convictions, if he attempts to discharge the duties of his responsible office without fear or favor, if he can neither be corrupted nor intimidated, all available railroad forces will be marshalled against him in the future.’¹

For a more recent account of this sort of thing the following editorial from *Collier’s Weekly*² is worthy of careful consideration :

¹ *The Railroad Problem*, 1893, p. 211.

² June 26, 1909.

CALIFORNIA AND THE SOUTHERN PACIFIC

‘For California, no remedy may be expected from the courts. That question has already been tested. The Southern Pacific dictates the nominations of the judges for the California Supreme bench, and, wherever it can, dictates as well the nominations of the local judges. The Southern Pacific Senators, *Flint* and *Perkins*, are in control of all Washington judicial appointments in which California is interested. Years ago California adopted a Constitution which had many popular provisions, but they have been reduced to a nullity by court decisions. One provision was this :

“Whenever a railroad corporation shall, for the purpose of competing with any other common carrier, lower its rates for transportation of passengers or freight from one point to another, such reduced rates shall not be again raised or increased from such standard without the consent of the governmental authority in which shall be vested the power to regulate fares and freights.”

‘This is not the sort of thing that ought to be put in a Constitution, which should deal rather with general principles. But it was a pathetic attempt of the people to erect a permanent barrier against monopoly and provide against the seduction of future Legislatures by the railroads. But observe that, like the prescribed language for an indictment in the preceding editorial, it *was* in the Constitution. What happened ? The San Joaquin Valley Railroad made a first-class passenger rate from San Francisco to Fresno of \$3.75. The Southern Pacific rate was \$5.90, but it met the San Joaquin Valley rate. Afterward, when the competition had ceased, the Southern Pacific went back to its old rate of \$5.90. Suit was brought to prevent this, and Judge Bahrs of San Francisco decided against the railroad company. The Supreme Court reversed Judge Bahrs. The Southern Pacific political machine

failed to renominate Judge Bahrs, and when Judge Kerrigan tried the case the second time he in his wisdom decided it in favour of the railroad company. The Supreme Court sustained Judge Kerrigan. They read out of the constitutional provision the very power which the people, in clear, direct language, had sought to put into it—and the decision was written by Judge Beatty, the Chief Justice. The court decided that the San Joaquin Valley Railroad had no right to reduce its passenger rate, or at least no business, but that, having done it, the Southern Pacific simply did a praiseworthy act in protecting itself by lowering its rate to meet the unjust competition ; that is to say, the Supreme Court invoked the doctrine of justifiable self-defence in favour of the Southern Pacific, and to do it wholly destroyed a constitutional provision. Its decision is amazing reading, as can well be imagined.’

A more recent, and if possible a still more blatant instance of this form of railway corruption, occurred only last year in the State of Washington.¹ *Collier's Weekly*,² one of the few papers in the country which considered the episode worthy of serious comment, published the following able and incisive editorial :

‘ THE COURTS AGAIN

‘ The Courts in many Western and South-western States have for nearly a generation been corruptly controlled by the railroads and other large corporations. Of the largeness of this generality, we are by no means unaware. To the specifications under it which we have already given, we shall from time to time add others. Corporation control of legislatures is evil enough ; corporation control of the courts is infinitely more sinister for this reason : One

¹ For detailed account of this shocking affair, see *La Follette's Weekly*, July 24, 1909.

² July 10, 1909.

purchased decision makes the law for future generations. That is the way courts work—one final decision is binding upon all judges in the same State. Every future similar case that comes up must be decided the same way. It will take several decades of honest courts to undo the wrong that has been fastened upon the people of several Western States by the judges that the railroads and corporations have controlled in the past.

'THE COURTS AND JAMES J. HILL'S RAILROAD

'The Supreme Court of the State of Washington, just about a year ago, heard and decided a damage suit (*Harris v. the Great Northern Railway Company*). They decided it *against the company*. The railroad company paid the amount of the judgment—about \$1,400. They didn't mind that much money, but they went to work to guard against ever again losing a similar suit. Their Spokane attorney, M. J. Gordon, carefully prepared another opinion, *changing the law as previously laid down by the court*. This opinion he sent on to the head office of the Great Northern Company in Minneapolis. There it was carefully read by the chief counsel of the railroad, W. R. Begg, and by him approved as an opinion which, if once inserted in the law books, would safeguard the railroad against ever again losing a damage suit like the Harris one. Begg, the chief counsel, having approved the opinion, sent it back to Gordon, the local Great Northern attorney in Spokane. Gordon then carried the opinion to his close friend, Judge Milo A. Root, who had written the first opinion in the Harris case, and *got Judge Root to substitute the opinion which the railroad attorney had prepared*. Judge Root subsequently admitted this, and all the facts are established by correspondence and evidence in the possession of the State Bar Association. We presume that even those lawyers who criticise us bitterly for undermining popular faith in the sanctity of the courts will not fail to feel some

horror at this transaction. The opinion prepared by the railroad attorney was so worded as to protect the corporation from future losses in similar damage suits. It was filed hurriedly, so that it might govern the trial court in Spokane in another damage suit against the railroad, about to be tried. Gordon, the local attorney for the Great Northern, who was the prime mover in this transaction, was himself years ago Chief Justice of the State of Washington, and resigned that office to accept the railroad attorneyship. While he held the office of Chief Justice, he handed down a long series of opinions which astonished lawyers by their corporate leanings. One of these set aside a clearly expressed statute, and deprived any one but the widow and children of a man killed by the negligence of the railroads of the right to sue for damages for his death. This made it impossible, for example, for a mother to sue for damages for the death of her son. It made it possible for the railroads, by carefully employing only unmarried men, to avoid any pecuniary responsibility for the safety of the lives of those who worked for them.

BRUTALITY

'The judicial scandal now disquieting the State of Washington is only an episode. So rank have been many of the corporation decisions handed down by the Supreme Courts in some Southern and Western States that the Federal Courts are refusing to follow them. Among these are decisions which deny to the heirs of a foreigner working in this country the right to sue for damages for the negligence which results in his death. Having got this judicial precedent fixed in the law books, the way was simple for the corporations: employ foreigners only, use no safety devices, kill as many as you like, and remain immune from damage suits. The discrimination against citizens of the United States in the hiring of men is a small part of this brutality. In one case in the West where a score of miners were killed through the alleged fault of one of the subsidiary corpora-

tions of the Amalgamated Copper Company, the damage suits were all thrown out of court on the theory that the widows and children of these men had no rights. Some of the Federal Courts have declared this attitude contrary to law and justice. The scandal of the Supreme Court of Colorado is fresh in the public mind. That court was increased by law from three to seven—a somewhat similar increase was recently made in Washington—and the Colorado court was packed by certain corporations whose candidates were selected by them and appointed by the Governor. It was done to secure certain decisions unfriendly to labour, and to protect certain franchises by which the city of Denver was despoiled. Exactly what happened in Washington happened there—a decision against a corporation was withdrawn and changed to favour the corporation.’

RAILWAY POLITICAL CORRUPTION

A small library might easily be written concerning the corrupting influence of American railways in politics. The best brief account of this pernicious form of railway activity is that by the late Professor Frank Parsons.¹ No thinking man can read this detailed and thoroughly documented indictment of the corrupt political influence exerted by the railways of this country, without a feeling of horror and humiliation that such practices could ever have been permitted. Among the valuable opinions quoted from other eminent authorities, is one by Judge Cooley, of the Michigan Supreme Court, and afterwards United States Interstate Commerce Commissioner. He says: ‘Some of the great and wealthy corporations actually have greater influence in this country at large, and upon the legislation of the country, than the states to which they owe their corporate existence.’

¹ *The Railways, the Trusts, and the People*, chap. v.

Professor Jenks, of Cornell, the leading expert for the United States Industrial Commission, described the same condition of affairs, as follows :¹

‘It is a matter of rumour, and almost of common belief, that the railroads and the large industrial combinations are able to influence to a material extent the acts of our legislatures and even the decisions of our courts. This influence is thought by many to constitute their chief menace to the integrity of our institutions and the welfare of the country.’

The following statement by John Graham Brooks, President of the American Social Science Association, is also worthy of profound consideration. He says :²

‘No lackey was ever more subservient to his master than Pennsylvania to its railroads, or than the State of California to the Southern Pacific. These corporations have owned the States, as the landlords in England owned the rotten boroughs before the reform. If a few of the largest businesses of Pennsylvania—transportation, oil, iron, and mining—were grouped together, and their history faithfully told, we should know the origin and character of a large part of Pennsylvania politics. The history of the Boston and Maine Railroad in New Hampshire would be at the same time the mere record of much contemporary politics in that State. Very nearly all that this railroad wanted has been recorded politically as the will of the people. Very little of what the people wanted has been so recorded, if the demands were thought to run counter to the interests of this corporation. *The great business thus not only sets its stamp on politics, it is to a large extent its creator and controller.*’

Quotations of this sort might be cited almost without limit, but it would serve no particular purpose to multiply these descriptions of this diseased condition of our political and industrial life, about the existence

¹ *The Trust Problem*, p. 190.

² *The Social Unrest*, pp. 47–57.

of which there long has been no dispute among intelligent people. That railway influence has been the dominant factor in both state and national political life in the United States for half a century, is a fact which has been so thoroughly established as to occasion little remark on the part of anybody except a few 'professional reformers', 'agitators' and other 'disturbers of business conditions'. Among the 'better elements of society', this pathological condition of affairs long has been accepted as one of the basic facts of the business and political world, as something not to be caviled at, or to grow hysterical over, but rather where occasion offers, to be taken advantage of. While in university circles, the attitude of calm and graceful acquiescence in a state of affairs come to be recognized as inevitable, is not as common as it once was, yet many 'eminent' professors, like certain equally and similarly 'eminent' politicians and publicists, still seem content merely to scrutinize and analyse existing conditions, while leaving it to the 'muck rakers', 'reformers,' and 'fanatics' of the country to indulge in that coarse and vulgar form of 'cheap clap-trap', in which bribery, corruption, political treachery, and the prostitution of the powers of government to the base purposes of a clique of financial pirates, are spoken of by their real names.

It is encouraging to note, however, that at present there is less corruption in connection with American railways than there has been at any time during the past fifty years. But while congratulating ourselves on this improvement, let us not fail to recognize that it is not due to any noticeable changes in

the desires and ideals of railway manipulators and managers, but rather to certain irresistible movements of public opinion, manifesting themselves in the changed attitude of the press, as well as of politicians, state and national.

As long as the moral and legal pressure, now being brought to bear upon the railways, can be kept up, it seems probable that the ground thus far gained, can be held, but the moment a pound of that pressure is removed, we may expect to witness a sudden moral collapse on the part of all those financiers who so long and so profitably in the past have plundered the public and debauched its representatives.

CONCLUSIONS

It thus becomes luminously clear, that during the past half century there has been incomparably more corruption, graft, and commercial and political treachery in connection with corporation railways than with those which are owned and operated by the public. A detailed explanation of the causes of this state of affairs would require more space than I am at liberty to give to this interesting and odorous branch of the railway problem, but perhaps it may not be out of place to suggest very briefly two or three of the elements which must be taken into account in attempting to work out such an explanation.

In the first place, as a result of the railway monopoly generally enjoyed by a government system, the temptation to grant discriminations in order to secure traffic from competing roads is entirely removed. The

French Government, by granting such a monopoly to each of its large railway companies in its special section or sphere of influence, has eliminated a large part of this fruitful source of commercial tyranny and corruption. As one after another, the railways of France are purchased by the nation and united under one state management, the gradual elimination of everything savouring of favouritism or discrimination will be continued, until, with the completion of the process of railway nationalization, this particular form of wholesale railway dishonesty will have reached the vanishing point.

Another consideration of fundamental importance is the fact that two other colossal evils of our present system, commonly known as railway stock watering, and stock manipulation, must necessarily disappear with the advent of a governmental régime, for the simple reason that all motives for their continuance will have ceased to exist.

While doubtless there would remain the possibility of political manipulation and sectional 'log rolling', such as Mr. Hugo Meyer dwells upon with such exaggerated emphasis in his *Governmental Regulation of Railroad Rates*, there can be no doubt that this evil would be infinitely less dangerous and degrading than is the practice by our railways of their present methods of highly systematized and scientifically developed political corruption.

Unquestionably, the opportunity still would remain also for individual railway employees and officials to graft secretly on a homoeopathic scale, but it seems highly probable that even this form of corruption soon

would become very much less common than it is under our present system. When conductors, baggage masters and other railway employees and officials know, as at present, that a number of their superiors—directors, presidents, and large stock-holders—are surreptitiously and dishonestly pocketing thousands and millions of dollars at every favourable opportunity, is it any wonder that some of them become morally confused and demoralized, to such an extent that they endeavour to ‘knock down’ a few dollars themselves? And is it not highly probable that, if a new régime should be ushered in, which guaranteed a ‘square deal’ to every one—if honesty, as well as efficiency, were recognized as necessary characteristics of officials big and little—is it not probable that the entire personnel would surely, even if slowly, become imbued with this new spirit, and finally learn to serve the public assiduously and conscientiously?

The great and fundamental weakness which apparently is inherent in all methods of state regulation or control of private railways, can be understood perhaps by means of an analogy. It is a matter of history that, in the early days, many of our western border towns found that the best, and sometimes the only way to preserve order, was to elect as town-marshal the most skilful and the most feared among their ‘bad men’. Frequently, these ‘bad men’ were simply courageous, powerful individuals, who, in the absence of any recognized governmental authority, administered a crude approximation to justice on their own account. Afterwards, when honoured by the community with the responsibility of enforcing a higher judicial code,

they acquitted themselves with credit and sometimes with heroism.

In like manner, the experience of continental Europe goes to show that the best way to provide a country with a 'square deal' in the matter of railway transportation, is to secure as public servants some of the most capable railway organizers and managers in the country. But such men cannot be had for the utterly insignificant salaries paid to 'inspectors'. More than that, no really first-class man *of this particular psychological type*, except when impelled by a peculiarly powerful sense of duty, would be willing, at any price, to strip his life of the zest and exhilaration of positive constructive effort, to become, as it were, a mere critic, supervisor, or moral mentor—to spend his existence keeping tab on the honesty and efficiency of those who are engaged in the more virile creative activities of normal man. The first instinctive demand of a powerful spontaneous and positive nature is the demand for an opportunity to act, to achieve, to give free and vital expression to the unknown forces, the untried powers that surge and press from within.

Hence, in order to secure the services of the aggressive and constructive master minds of the railway world, most European countries have found it necessary for the Government to purchase the railways, and engage these men to run them in the interest of the whole nation. It is noteworthy that, in almost every instance, such managers have proved as faithful to their new master, the public, as they had been to their old masters—the stock-holders and stock manipulators.

CHAPTER XIII

THE SPOILS SYSTEM AND STATE RAILWAYS

PROBABLY the strongest argument that ever has been urged against the Government ownership and management of railways, is the one to the effect that such ownership and management would involve an enormous increase in the political patronage which politicians would be allowed to treat as one of the spoils of office. The fear lest an administration, once in power, could never be dislodged if under its control were placed so large an army of employees, has made many honest men hesitate, and sometimes decide against the principle of Government ownership.

It might as well be admitted at the start, that if the Government ownership of railways necessarily involved the enrolment of all the railway employees of the country into an army of political Hessians, ready at all times to obey the dictates of their political superiors, then, unquestionably, the inauguration of such a régime would be fraught with momentous peril to modern democratic institutions. But the experience of those European countries which have tried the plan of State ownership, shows that this nightmare of the individualist exists only in his imagination.

In a great industrial enterprise of this nature, it is utterly impossible for a political party to give employment only, or even largely, to its own members. As

an illustration of one of the methods employed for selecting railway employees, without any serious reference to their political affiliations, the method of employing 'skilled and unskilled labour' on the Belgian State railways is of interest. An applicant must not be more than thirty-five years old if he is a skilled labourer, nor more than thirty-two years old if he is unskilled. All applications for employment are divided into the following five categories. First category : Sons of railway employees who have been killed while in service, or who have died or become incapacitated for work, as a result of wounds received while performing their duties. Second category : Sons of employees who have died or become infirm after at least ten years of service, or of employees who have been given inferior positions on account of having lost their health as a result of injuries received while in the service. Third category : The sons of employees who have been employed by the road for at least twenty years. Fourth category : Candidates recommended by the Minister, and those who have had two years' military service. Fifth category : All other candidates.

The candidates in the first category are given the first chance to obtain any position which they have demonstrated themselves to be mentally and physically qualified to fill. Any positions which the candidates in the first category do not take, are then filled by properly qualified candidates in the second category, provided there are enough of them. If not, the members of the third category are called upon, and so on until

all the candidates of all the categories have been disposed of.

In each of these categories the various candidates are enrolled in the order of their application for a position, in accordance with the well-established principle 'first come, first served'. It seems fairly evident, however, that the formation of the fourth category was brought about in order to enable the politicians to build up a political machine. It was created by the Minister Vandenpeereboom, of the Catholic party, with the intention, it is said, of keeping the Socialists from getting employment on the State railways. But this attempt has been a *complete failure*. It has simply resulted in the application for ministerial recommendation, of all the candidates who otherwise would have enrolled themselves in the fifth category. The Socialist labouring men, like the others, have found it a very easy matter to get a Catholic deputy or Senator to back up their demand for ministerial recommendation. In fact such assistance is never refused, because the deputies and Senators ask for nothing better than an opportunity to increase their personal popularity by rendering little services to voters in their district.

Before any candidate is finally accepted and given a position as a skilled labourer, he must pass an examination by doing some piece of practical work, and on his success at that piece of work depends not only the question as to whether or not he is to get the job, but likewise the amount of his salary.

Most of the other categories of Belgian railway

employees are chosen likewise by means of competitive examinations, followed by practical tests of efficiency. For example, an applicant for a position as a civil engineer, first of all, must be not more than twenty-nine years of age; and secondly, must have his engineer's diploma from some recognized Belgian technical institution. He is examined, both in the pure sciences and in such applied sciences as are likely to prove useful in the exercise of his duties as a railway engineer. The examinations are conducted in the fairest possible manner by judges composed of three members of the railway administration, and four professors from the four great Belgian Universities: the State Universities of Liege and Gand, the Catholic University of Louvain, and the Liberal University of Brussels. Candidates who have passed these examinations creditably are then taken on trial for a period of two years, at the end of which time they are required to pass a new examination before the same judges. After passing this examination successfully, the candidate is given his permanent status as an engineer of the third class.

After having passed through this test stage, candidates are then ready to be assigned to permanent posts of service. Here a slight opportunity for favouritism creeps in—men who have a 'pull' with 'the powers that be' undoubtedly stand a better chance than the others of being sent to the particular city they prefer to live in, as well as of being assigned to the special branch of the service which they like best. But even granting all this, we must recognize that we are very far from having demonstrated that the power of a 'pull'

is any greater on the State railways of Belgium than it is on the corporation roads of America. As an illustration of the growing necessity of having powerful friends, if one is to get his just deserts in the way of advancement in corporation employment, the case of a young stenographer once in my employ is not without interest. He was one of the most rapid and accurate stenographers in the country—having always been regarded as a phenomenon in this particular. Being young and ambitious, he one day had a long and serious conversation about his future plans and prospects with his employer, the President of one of our largest railways. During the course of this conversation he was strongly advised, in case he desired to rise in the world and make the most of himself, to leave railway employment. ‘I give you this advice,’ said the railway President, ‘because in connection with our railways, after you have reached a certain point, your chances for promotion, unless you have some powerful backers to push your claims, are almost infinitesimal.’

To be sure, if a man is a genius, or is so clear-headed, long-headed, and capable of such continuous mental effort as to be able to make himself absolutely necessary to some railway administration, it is quite possible for him to rise to a very high position. Moreover, if his conscience is so callous that he is willing to become the moral man Friday and to do the dirty work of great ‘financiers’, he may even aspire to a railway presidency. But unfortunately the pathway to power and influence in our great railway corporations is very far from being wide open to the feet of those whose only recommenda-

tion is that they possess unusual talent, integrity, and industry.

The methods of recruiting and promoting employees used by the Belgian state railway administration unquestionably are imperfect, and can and will be improved upon in the future. For instance, the custom of making all promotions dependent entirely upon seniority of service, without any account being taken of unusual ability, energy, or industry, is vicious, and eventually must be superseded by a more rational plan of procedure. But however that may be, the all-important fact has been established beyond the shadow of a doubt, that the great body of Belgian railwaymen in no way constitutes a political machine capable of being used by the administration to secure for itself a continuance in power. As a matter of fact, *neither in Belgium nor Germany, nor in any other country possessing state railways, has any such serious and concerted attempt ever been made to coerce employees into voting against their private convictions, as was made by corporation railway officials in the United States during the presidential campaign of 1896.*

One of the worst cases on record of an attempted coercion of railway employees, occurred recently, not on a Government railway, but on an English corporation line.¹ A number of wealthy merchants went to the General Manager of the Midland road, and, on the ground of being heavy shippers, insisted that he aid them in their competitive struggle with the rapidly spreading co-operative societies. Accordingly, a general order

¹ *The Railways, the Trusts, and the People*, Frank Parsons, pp. 281-2.

was issued and posted all along the line, to the effect that all employees belonging to co-operative societies must withdraw from them or forfeit their positions on the road.

Fortunately the co-operators, having might as well as right on their side, were able to defend themselves. Mr. Grey, General Secretary of the Co-operative Union, with over 2,000,000 members, 5,000 stores, and a yearly business of over \$450,000,000, thereupon called on the railway manager, and, in substance, said : ' If this order is not instantly recalled we will divert from your road within a fortnight \$600,000 worth of traffic. Moreover, we own a big bunch of your stock, which we will divide up and so vote that whenever possible we'll prevent you from doing any business at stockholders' meetings. And lastly, we have friends in Parliament who will oppose and try to block every measure that you favour.'

This ultimatum had the desired effect. The attempt at intimidation failed, and ' private enterprise ' was shown up in the unenviable situation of combining feebleness with brutality.

Some such system as that employed by Belgium, of selecting employees for their fitness rather than because of their political affiliation, *is made use of by every State railway administration in Europe*. In Switzerland, all the regular employees of the railways are required to pass a satisfactory examination—but permanent employment and preferment are even more dependent on the workman's practical efficiency than on his skill in passing examinations. As Swiss political moral standards are vastly higher than ours, however, and

as the spoils system has never been introduced into their country, the Swiss are not required to resort to the extraordinary precautions which we find necessary in order to keep our civil service from degenerating into a sort of house of refuge for decayed political hacks and budding or full-blown 'statesmen out of a job'. When the Swiss Confederation took over the management of the railways of the country, nearly all the old employees of the previous railway companies were retained in their former positions, and, while every year some changes of personnel are found necessary, there seems at present little likelihood that political 'pull' will ever become a serious menace to an efficient Swiss railway service. Even the Swiss opponents of Government ownership with whom I have talked, do not seem to feel any apprehension on this score—their main fear being that the railway employees, who are well organized, may come to regard their personal interests as paramount to the public interest, and thus try to use their united franchises as a club with which to extort unfairly high wages or absurdly short hours of service, or both.¹ Fortunately, up to the present time, there have been in Switzerland no serious manifestations of this sodden and entirely detestable spirit.

It is well known that the Prussian system of civil service, as applied both to railway employees and other government officials, is a monument to the organizing

¹ The recent organization of the 'American Railroad Employees and Industrial Investors' Association' makes it look as though there soon would be a greater manifestation of this spirit on the part of the employees of our corporation railways than ever has been shown by the employees of any state railway in the world.

ability of that splendid race. Its higher railway officials are required to have a university or technical school education before they take the State examinations for the railway service. Its engineers must have a thorough technical education, and must have practised their profession for eight or ten years in private employment before they are qualified to take the second examination required by the State. Those employees whose work demands an understanding of the law are required to have a thorough legal education, and at least four years of practice at the bar, before they can take their second examination for the State railway service. They then are required to serve a year's apprenticeship before they are given permanent employment. The only category of employees which does not fall under the Prussian Civil Service rules is the lowest quality of labour, which is performed by men who are hired and discharged at the discretion of the higher officials. And finally, when once a man has obtained a permanent position in the Prussian railway service, he cannot be discharged except for serious misconduct, which has been properly investigated and pronounced upon by the proper authorities.

Speaking on this subject, President Hadley, of Yale, says :¹

'This brings us to the political dangers of the state railroad system. . . . In Prussia there is little or no complaint. This is chiefly due to the superb organization of the Prussian civil service.'

The late Professor Frank Parsons gives fuller details

¹ *Railroad Transportation*, p. 252.

as to the workings of this 'superb organization'. Among other things he says :¹

'Political influence does not enter into the administration nor into the employment of the men. The spoils system is unknown in Germany. No member of Parliament can get a friend or constituent work on the State railways through political influence. The man must be thoroughly fit, and must prove his fitness by undergoing the civil service tests, like any other candidate for employment. Even the Minister cannot over-ride the civil service rules, nor can the Emperor himself disturb the impartiality and efficiency of railway organization by the infusion of political influence into appointments.

'While in Berlin, I asked a gentleman thoroughly acquainted with the French and German railways (and other European systems also) if the German management ever told the men how to vote, or suggested what candidates it would be well to elect. "No," he replied, "that is done in France sometimes, but not in Germany. French railway managers tell their employees what deputies to vote for when they feel that their election is important to them; but railway managers in Germany would not think of doing that, and it would not be tolerated if they did."

'The same question was put many times in different parts of Germany, to both friends and opponents of the administration, and the answer was always in the negative.'

Professor F. W. Taussig, of Harvard, probably the ablest orthodox economist in America, closes an interesting and valuable discussion of this problem with the following concise and able summing up of this phase of the railway question :²

'The defects of the past doubtless have been due largely

¹ *The Railways, the Trusts, and the People*, Frank Parsons, p. 326.

² *Quarterly Journal of Economics*, October 1894, pp. 86-7.

to historical causes. When the private railways were bought by the state, their divisions and boundaries were naturally made the basis of the organization of the state railways. As time has gone on and the system of public management has got into permanent working order, the rearrangement in organization has become feasible, and a scheme having this object in view was laid before the Landtag during the last spring. But it may be fairly inferred that, in addition to the defects due to the transition from private to public management, some of the defects inevitable in public management even at its best have shown themselves. A certain unwieldiness, a mechanical insistence on obedience to rules and regulations, a cumbrous system of checks and counter-checks, an excess of formalism not least likely in a bureaucracy like that of Germany, a lack of freedom and elasticity—these are the obvious drawbacks of public management; and the indications are that they have shown themselves in Prussia.

‘All this, however, is not inconsistent with admitting that the system of public management in Prussia has been, on the whole, unmistakably successful. Financially, industrially, and probably even in the details of administration, the Prussians have reason to be proud of the results secured by their body of trained public servants. The opponents of public management in countries like England and the United States will doubtless be tempted to find in the current controversy evidence in support of their assertions as to the general disadvantages of state ownership. But it is significant that even the severest critics in Germany never hint at such a thing as a return to the system of private ownership or suggest that the evils of the present régime outweigh its benefits. If some mistakes have been made, and if some of the defects inevitable in any system of public management have been encountered, the general result has, none the less, been one in which the German people and German bureaucracy may take pride.’

It thus becomes apparent from a careful survey of the railway history of the various countries under consideration, that in none of them have State railway employees ever been known to organize themselves, or permit themselves to be organized, into a political machine, capable of being dominated and prostituted to the selfish personal ends of politicians and Government officials. Owing to the almost universally employed method of recruiting their ranks by means of competitive examinations, and also to the permanent status or life tenure of office which nearly every country has conferred upon them, they enjoy practically everywhere a high degree of immunity from political coercion, intimidation, or undue influence of any kind. A striking and rather amusing illustration of their freedom from political constraint is to be found in the decided Socialistic tendencies which a large number of them have manifested for a number of years, by voting steadily 'agin the Government' without thereby in any way jeopardizing their governmental positions.

CHAPTER XIV

THE INDUSTRIAL STATE

IN spite of the very substantial successes achieved by the State railways of Germany and Belgium, most railway authorities are now agreed that their systems of railway administration are very far from being the best that could have been devised, and, consequently, that the results attained by them might have been even more creditable had their form of organization been more satisfactory. Perhaps the most undesirable feature about their administrative machinery is the unwholesome fusion and confusion of the finances of the railways with those of the state or national governments. In Germany, as a result of this mistaken policy, the profits of the roads, instead of being devoted exclusively to such purposes as the lowering of rates, the raising of wages, the increasing of the efficiency of the service, and the liquidation of the bonded indebtedness of the roads, are diverted to a large extent into the treasuries of the various German states to lighten the general burden of taxation. For instance, the single State of Prussia in 1905 had a net profit on its railways of over \$130,000,000—which means that it levied a tax on the business of the country to that extent.

Owing to a wise provision incorporated into the Belgian law of May 1, 1834, specifying the three objects

to which profits should be devoted, i. e. operating and general maintenance expenses, the payment of interest charges and the regular liquidation of the bonded indebtedness, no attempt has ever been made in Belgium to increase the profits of the roads beyond the requirements of an efficient railway administration. Nevertheless, owing to the fact that no clear line of cleavage has been drawn between the nature and functions of the political state and those of the industrial state, Belgian methods of State railway management have always been more or less hampered by governmental red tape and routine. In the light of these facts, it is encouraging to note that the general tendency not only of European legislation, but of the judicial decisions of the leading continental countries, is toward the recognition of a fundamental and far-reaching distinction between the political state, which establishes and enforces the law of the land, and the business state, which, by entering the field of industry and commerce, renders itself as amenable to that law as is the humblest individual citizen.

The three latest European countries to undertake the nationalization of their railways, Switzerland, Italy, and France, all have incorporated into their systems of management this new and important distinction between the sphere of the general government and that of its industrial adjuncts. The general principles upon which are based this modern conception of the proper form of State railway organization were set forth in the message issued in 1907 by the Swiss Federal Council. Among other things it says :

' In order that the state railways may realize our expectations and serve the economic interest of the entire country, it is necessary that their administration should have as independent a position as possible in the federal administration. On the one hand, there is danger lest an organization so vast and with such numerous ramifications become, when centralized, an instrument subject to abuses for the attainment of political ends. On the other hand, we must see to it that, with all the power it is bound to wield, the railroad administration does not come to form a state within a state, and that no conflicts arise between it and the Federal Council. If, in order to achieve good results, the railway management demands the greatest possible concentration of all its forces, nevertheless it must be so organized as to be in conformity with our political development, which is incompatible with every species of bureaucracy, and never loses sight of the interests of the individual cantons and communes.'

In order to prevent any abuse of the discretionary powers of the new and largely autonomous State railway administration, the Federal Council and the Federal Assembly retained in their own hands all the rights of general supervision and control which they had exercised formerly over private corporation roads, together with certain other important prerogatives. As the law finally passed the Federal Chambers, somewhat less independence was granted to the State railway management than had been the original intention of the Federal Council, but even as weakened by amendments giving to the Federal Chambers more of a hand than was necessary in the direct management of the roads, it nevertheless marked a distinct advance over any previous legislation of this nature by any European country.

SWISS STATE RAILWAY ADMINISTRATION

In conformity with these principles, the Swiss railway law of October 15, 1897, providing for the purchase and operation of the railways of the Confederation, contained the following provisions :

‘ Art. 8. The accounts of the Federal railways shall be separated from those of the other branches of the Federal Administration and be kept in such a manner that the exact financial situation can be determined at any time.

‘ The net income of the Federal railways is to be used in the first place for the payment of interest on and the amortization of the railway debt.

‘ Out of the further surplus twenty per cent shall be paid into a special reserve fund, to be kept separate from the other assets of the Federal railways until this fund including the accrued interest shall have attained the amount of fifty million francs. The remaining eighty per cent are to be employed in behalf of the Federal railways, in improving the transportation facilities, and notably in reducing proportionally passenger and freight rates, and in extending the Swiss railway system, particularly its secondary lines.’

Article 13 of the law shows the extent of the powers over railway administration retained by the general Government.

‘ Art. 13. The following provisions regulate the supreme management of the administration by the Federal authorities :

‘ A. The Federal Assembly has cognizance of the following matters :

‘ 1. The ratification of loan operations and of plans of amortization.

‘ 2. The ratification of contracts relating to the acquisition of other existing lines, as well as to the taking over of the

operation of secondary railways and the assumption by the Confederation of existing contracts of operation between the principal railways mentioned in Art. 2 and secondary railways.

‘ 3. Legislation establishing the general principles governing railway rates.

‘ 4. The elaboration of laws having for their object the acquisition and the construction of railways.

‘ 5. Legislation concerning salaries.

‘ 6. The approval of the annual budgets.

‘ 7. The examination and approval of the annual accounts and the report of the management.

‘ B. The Federal Council has cognizance of the following matters :

‘ 1. The elaboration of regulations for the execution of the present Act.

‘ 2. The selection

(a) Of 25 members of the Federal Administrative Council. (Art. 16.)

(b) Of the members of the Central Board and the District Board of Directors. (Arts. 23 and 33.)

(c) Of four members of each District Administrative Council. (Art. 29.)

‘ 3. The presentation to the Federal Chambers of

(a) The annual budget, accounts, and Report.

(b) Bills regarding the taking over by the Confederation of the operation of secondary lines, and the assuming by it of contracts of operation that may be in force between the main lines as mentioned in Art. 2 and secondary lines. (Art. 5.)

(c) Bills regarding the construction of new lines and the acquisition of existing lines.

‘ 4. The exercise of the same prerogatives which the Federal Council actually possesses with regard to private railways, so far as there may still remain occasion for the exercise of these prerogatives in connection with the federal railways.

‘ 5. The approval of the regulations relating to pension and relief funds for the officials and permanent employees.

‘ 6. The elaboration of regulations relating to the creation of sick benefit funds.’

ITALIAN STATE RAILWAY ADMINISTRATION

That the same conception of an autonomous, responsible and businesslike State railway administration, subject to strict control on the part of the general Government, likewise guided the framers of the Italian law of July 7, 1907, is made evident by Articles 3 and 36 of that law.

‘ Art. 3. The independent administration of the State railways, under the high direction and responsibility of the Minister of Public Works, shall have the direct management of all matters relating to the operation of the railway system and of the navigation service, mentioned in the preceding articles, and in the exercise of these functions, is charged with its proper budget.

‘ The Minister of Public Works and in those parts which concern him, the Minister of the Treasury, shall ascertain by means of inspections the regularity of the service and of the management.

‘ The regulations for such inspections shall be fixed by executive orders proposed by the Ministers of Public Works and of the Treasury, passed upon by the State Council ; approved by the Cabinet Council and sanctioned by Royal decree.

‘ Art. 36. The Compartmental Cashier’s offices (*casse compartimentali*) collect the available revenue of the stations and all other ordinary and extraordinary income and provide for the payment of expenditures upon direct or service drafts or drafts for advances (*mandati o diretti o a disposizione o di anticipazione*), and the payment on account of the

pay rolls issued by the Administration and certified by the Central or Compartmental audit offices.

‘The amounts exceeding the daily needs of the cashier’s office are deposited with the ‘Banca d’Italia’.

‘These amounts shall be kept, in a special interest bearing current account, distinct from that of the State Treasury’s, on the terms proposed by the Minister of the Treasury in accord with the Minister of Public Works and approved by Royal decree.

‘The Director-General shall have the power to draw upon said special current account for the needs of the railway service by means of drafts certified by the representative of the public treasury at the treasury section of the bank, in accordance with the by-laws.

‘The regulations for the railway treasury service and those relating to the collection, custody, and deposit of the moneys shall be fixed by the by-laws.’

FRENCH STATE RAILWAY ADMINISTRATION

In like manner, the French Government, in its argument in favour of the recent purchase of the Western Railway, laid great emphasis on this idea of giving to the new State management sufficient financial and administrative independence to enable it to operate the road in the most efficient and businesslike way possible.

‘The administrative organization,’ it announced,¹ ‘to which will be confided the task of operating the new state line, including the old Western road, must possess the autonomy and the suppleness which are indispensable to the efficient management of a large industry; it must, furthermore, be provided with financial powers which will enable it, by the issuance of bonds, to raise the funds

¹ *Projet de loi sur le régime financier et l’organisation administrative des chemins de fer de l’État*, p. 2.

necessary to provide for all expenditures other than those of actual "operating expenses".

In complete harmony with this fundamental distinction between the political state and the industrial state, is a law voted by the French Chamber of Deputies and Senate without a dissenting voice on March 21 and 30, 1905. Up to this time, the employees of the State railway in France, when they became involved in a controversy with the administration were required to submit to the special jurisdiction of administrative tribunals: In other words; they were regarded as 'State officials' in the strictest sense of the word, while the employees of the private companies, on the other hand, had the advantage of being judged like all other ordinary labouring men, by the ordinary tribunals. The law above mentioned changed the status of the employees of the State railway and placed them in the same category as the employees of private railways or of other ordinary industrial enterprises. This law, which contains only one article, is as follows :

'The ordinary tribunals are competent to deal with whatever controversies may arise between the state railway administration and its employees as to labor agreements.'

JUDICIAL DECISIONS AS TO THE LEGAL STATUS OF THE INDUSTRIAL STATE

An interesting case arose in France a few years ago in connection with an actress, Mademoiselle Sylviac, who, one day, after trying in vain to get a satisfactory explanation of the unsatisfactory telephone service she was receiving, lost her patience and made some insulting

remarks to a Government telephone employee. Her telephone, although she already had paid for it in advance, was disconnected, and suit was brought against her for having insulted a 'public official'. As Made-moiselle Sylviac resolutely fought her case in the courts, the press encouraged her, a large number of telephone subscribers rallied around her, and her case suddenly developed into an event of national importance. At this stage of the proceedings, however, the administration weakened, restored to her the use of her telephone, and finally offered, in case she would apologize, to withdraw the suit against her. But this she refused to do, and in the end won her case in the courts.

In speaking of this matter, Deputy Marcel Sembat, in his report for 1905 on 'the budget of the post-office, telegraphs, and telephones,' placed himself on record as holding absolutely to the view that,

'The state, when it takes over the monopoly of an industry, ought never to aggravate but always to ameliorate the condition of the workers in this industry, as well as to improve the service offered to the public for which it is run.'

The question involved was simply this: Is an insult addressed to an employee of an industrial adjunct to the Government more reprehensible, and should it incur severer penalties, than an insult addressed to a private individual? The court held that while if the insult had been addressed to a functionary representing the sovereign political Government it would have been especially reprehensible and punishable according to the law governing such cases, that on the other hand the employees of the *industrial state* were to be considered

as upon the same footing as employees of a private corporation, and for their protection must have recourse to the same laws which sufficed to protect all other private individuals.

A similar case in connection with a M. Belloche, though less interesting than the above mentioned one, was rather more important, because M. Belloche in his first trial was condemned to pay a hundred francs fine. This decision, however, was reversed by the Court of Appeals of Paris, and this reversal was finally confirmed by the Court of Cassation (the Supreme Court) of France, on February 18, 1905. Thus was established, by the highest tribunal in the land, the principle of the essential difference between the legal status of the political state and that of the industrial state. The court enunciated this principle in the following words :¹

‘ Let it be understood that the employees in the employ of the telephone service are not invested with any particle of the public authority, that notably the woman N., whose duty it was to arrange the telephone connection for subscribers who requested it, is not, even though her work is a matter of public interest, either an agent with whom is deposited the public authority or a citizen to whom has been assigned the administration of a public service.’

A recent decision of the French *Conseil d'État*, rendered January 20, 1905,² is in entire agreement with the decisions of the Court of Cassation above mentioned.

‘ The Council of State,’ says *Le Temps*,³ ‘ during its last session, very clearly defined the legal character of the state railway administration.

¹ Dalloz, *Recueil de Jurisprudence*, 1906, vol. i, p. 257.

² Ibid., Part III, p. 80.

³ January 27, 1905.

‘ The Minister of Public Works had issued a decision declaring a coal dealer, M. Paternoster, debtor to the Treasury for the sum of 50,000 francs, for failing to deliver a consignment of coal which he had contracted to supply to the state railway.

‘ But the Council of State declared that the state railway administration is invested with a legal personality distinct from that of the state, and that it alone is qualified, if it thinks it has grounds therefor, to demand reparation for the injury which one of its contractors has inflicted upon it. The minister can neither substitute himself for this administration in order to attempt to recover the damages which the dealer might owe the railway administration, nor make use of the powers which belong to him as the representative of the state, in order to declare this dealer a debtor to the Treasury.

‘ The decree of the Minister of Public Works was therefore annulled.’

A recent decision of a Bavarian court ¹ has likewise an important bearing on the principle involved in this comparatively modern differentiation of governmental functions. Some Bavarian citizens holding bonds of a railway which had formerly belonged to a private company, but which had afterward passed into the hands of the State of Austria, got into a legal controversy with the Austrian railway management. One of these Bavarians, basing his action upon a judgement which had been granted to him in a similar dispute with the original railway company, demanded and secured the seizure of some locomotives and freight-cars which had formerly belonged to the private company, but which at this time belonged to the Austrian State system.

¹ *Essai sur les Emprunts d'États étrangers*, Albert Wuarin, 1907, p. 105.

The Austrian Minister of Foreign Affairs raised the question of the competence of the Bavarian tribunal which had rendered the former decision. He contended that while this decision undoubtedly was a sound one as against the former private company, that nevertheless, it could not be made to apply to the sovereign state of Austria, which had taken over the properties of that company. A sovereign state, he insisted, could not be subject to the decisions of a foreign tribunal, as such subjection would constitute an inadmissible limitation of its sovereignty. Here the issue was joined on the most vital point that could have been raised in the controversy. The Bavarian Supreme Court met that issue squarely, and declared its entire competence to deal with the matter, for the reason that the Austrian nation, having voluntarily substituted itself for the private company, had thereby become responsible for all contracts of that company, which still retained their purely private character, and furthermore, that by the fact of this substitution the Austrian Government voluntarily had submitted itself to the jurisdiction of the Bavarian tribunal.

Thus did the court draw a clear distinction between the Austrian Government acting in a purely business capacity, and the Austrian Government acting in its governmental capacity as a sovereign state.

Unquestionably, we are just at the beginning of this differentiation in form and function and legal personality of the industrial state from the governing state. From the slight experience that already has been gained in connection with this new form of State indus-

trial administration, however, it is apparent that under the new régime, many of the old objections to government ownership of railways have been very largely removed. A few years ago there existed only two general types of railway administration, that of the private railway corporation, supposedly operated at a high state of industrial efficiency and with an eye solely to the gaining of the largest possible profits for its stockholders and stock manipulators, and that of State railway administration, run at a slightly lower level of economic efficiency, because forced to use the cumbersome administration methods employed by a political government, but having the great advantage of being able to ignore the question of profits, and to concentrate all its efforts upon the single task of providing the public with the best possible service at the least possible cost. Perhaps the most important single fact in connection with the railway development of modern times is this marked and increasing tendency of State railways to combine the natural advantages of both these types of railway administration. To the great and inherent advantage of management in the public interest, is being added the economic advantage which for so long was supposed to be the especial prerogative of private enterprise, i.e. management at the highest possible standard of business efficiency.

Here the question arises, If it is possible for a State railway administration to combine these two highly desirable features, why is it not possible for a private railway corporation to do likewise? In other words, is

Government control of an autonomous State railway administration preferable to Government control of a free and independent private corporation administration. Most European peoples believe that it is, for the simple reason that under a régime of Government regulation of private corporations it is always found that the Government and the corporations are working for distinctly different objects : the first to give to the public the best obtainable service at the smallest possible expense ; the second to realize the greatest possible profit to stockholders and financiers, irrespective of the kind of service furnished. This difference in their aims and purposes invariably has resulted in an exhausting and never-ceasing conflict between the Government and the railway corporations subject to its control.

When, on the other hand, the Government owning the railways has placed them in the hands of an autonomous State administration, it finds that this administration and itself are working for precisely the same object, i. e. to give the public the best possible service at the smallest cost. The political Government, therefore, has only to discuss with its industrial adjunct the question of *methods* for the attainment of their common object. Its functions are confined to the comparatively simple duty of seeing to it that the State railway administration is conducted honestly and efficiently. There is no possible conflict of interests ; the worst that can happen is that there may arise a conflict of opinions. But where people are honest and have the same object in view it is a comparatively simple matter, if not to come to an agreement, at least to effect a com-

promise as to the proper methods to be employed for the attainment of their common object.

The fundamental and irreconcilable nature of this conflict between the interests represented on the one hand by the Government, and on the other hand by railway corporation managers, was very clearly and concisely brought out in the concluding words of the government argument in favour of the State purchase of the Prussian railways in 1879.¹

‘If it were possible,’ said the government, ‘to make a system so perfect that the interests of the public could be thoroughly protected from the private companies, this system could not easily leave the railways free to increase their profits.

‘The intervention of the government limits and hinders the action of the companies, its requirements may even injure them and cut down their receipts; but in this event private capital will shun the enterprises so rigorously controlled, and the development of the railways will be checked. On the other hand, if the financial results of the enterprise commence to decrease, the necessity of not injuring the profitableness of the enterprise and of warding off the ruin which would be caused by a breakdown must cause the government to waive certain demands which it had made in the general interest. The system of private companies, therefore, must disappear because of these inconsistencies, i.e. that the interests of the public which are bound up with the railroads, are left at the mercy of private initiative and that government control cannot do that which actual state operation alone can accomplish.’

¹ *Étude comparé du Droit de Rachat, &c.*, Paul Deligny, p. 35.

CHAPTER XV

FINAL CONSIDERATIONS

IN the preceding pages an effort has been made to show the great desirability of working out for ourselves, in the immediate future, the most efficient possible system of State and Federal railway regulation. As the experience of other nations, however, all tends to indicate that no permanently satisfactory system of Government regulated corporation roads is at all likely to be evolved, the attention of the reader has been called to the world-wide trend in the direction of Government ownership, as well as to the favourable results so far obtained by European State railways. This has been done, not with a view to hastening the process of railway nationalization in this country—for according to present indications Government ownership is more apt to be brought about too suddenly than too gradually—but rather with a view to hastening the enactment of those preparatory measures which are necessary, if the future transfer of our railways from private to public hands is to be unaccompanied by a serious upsetting of our entire business and industrial equilibrium.

Moreover, an effort has been made to point out the fairest and most successful methods of railway nationalization yet evolved, as well as to indicate the best form of organization which can be given to our Federal

railway administration, in case the American people finally decide to have their transportation facilities operated, not for private profit, but by Government agents for the benefit of the entire country.

More attention has been paid to the institution of comparisons between private and public railways in Europe than between American corporation lines and European State railways, for the simple reason that European railways are much more comparable with each other than with far away systems like our own, which are operated to meet such widely different natural and industrial conditions. Moreover, more stress has been laid upon the weak points in our transportation system than upon the strong ones, because most of the cases in which our roads make a favourable showing in comparison with European Government roads are due, not to any inherent superiority of corporation management over Public management, but to certain natural advantages in favour of American roads, or to our superior economic efficiency as a nation ; whereas most of the cases in which our roads make an unfavourable showing are due, not so much to adverse natural, industrial, or political conditions, as to an exaggerated desire on the part of American railway managers and manipulators to rush traffic through and to economize at all hazards, even at the cost of human life.

By the foregoing studies in comparative efficiency and allroundsatisfactoriness, it has been clearly demonstrated that in *Continental Europe*, State railways as a rule furnish better transportation facilities and charge lower rates than do private companies ; that in connection with the

State railway managements examined there exists practically nothing in the nature of a 'spoils system' to prevent them from securing efficient officials and employees; that graft and corruption are much *less* frequent in connection with State railways than with private ones; that travel is much safer on Government roads than on private lines; and lastly, that State railways, instead of being troubled with deficits which have to be made up from the hard-earned shekels of the tax-payer, in a large majority of cases, have made an entirely satisfactory financial showing, and in some cases, notably that of Prussia, have lightened the burden of the tax-payer enormously. If there exists any inherent advantage therefore, in the one system or the other, such advantage assuredly is to be found in the system of Public ownership and operation, and the burden of proof must rest upon those who assume that the United States is incapable of doing what so many less favoured nations already have done with such signal success.

One very frequently hears urged as an objection to Government ownership of railways, the fact that the percentage of railway earnings which is absorbed in working expenses is bound to be larger under government than under private management. This seems to me to be not only undeniable but self-evident. Clearly a road cannot raise wages, shorten hours of labour, improve the service it renders, and decrease the remuneration it demands for that service, without noticeably increasing the percentage of its earnings which must go for working expenses. This objection to Government roads is only another way of stating the

most important argument which can be mentioned in their favour, i. e. that the aim of State roads is essentially different from that of private ones. Private roads have a supreme object in view—profits—though their managers recognize that in order to gain these profits they must furnish the public with a service that is not too unsatisfactory. Government roads likewise have a supreme object in view—the public service—though their managers recognize that in order to make that service permanently satisfactory and increasingly efficient they must assure themselves a reasonable remuneration. In a word, the corporations ‘charge all that the traffic will bear’, whereas the Government gives all that the rates demanded can be made to pay for.

A recognition of this important distinction does not, of course, remove the objection that some Government railways do not attain quite as high a standard of economic efficiency as private ones, but recent developments in the form of organization adopted by State railway administrations in Switzerland, Italy, France, and Mexico, tend to indicate that even this last and most valid of all objections that can be urged against State railway management is gradually being done away with, and that in the future we may expect as high, if not a higher standard of industrial efficiency on the part of an autonomous State railway administration, than on the part of a transportation system managed from Wall Street, in the interest not of the public, nor yet of the stockholder, but of the stock manipulator, hysterically absorbed in his utterly indefensible schemes

of predatory finance. However, even though it were granted for the sake of argument that the capital, brains, and brawn employed in running a given railway would be slightly more productive economically under private than under public management, this isolated fact could hardly be considered a very conclusive argument in favour of private ownership. It would simply go to show that private roads *could* give lower rates, better service, shorter hours of labour, and higher wages than Government roads, but that they *will not*, that they insist upon corraling for themselves all the benefits of their 'economic superiority'. As a consequence of this method of procedure, the benefits of our boasted 'general prosperity' and the 'increase in our *national wealth*', have found their most striking manifestation in the increase in the wealth or the number of those millionaires who have corrupted our voters, prostituted our press, purchased our legislatures, and befouled the whole world of finance, *until it is becoming apparent that this colossal and irresponsible wealth, in the hands of extremely intelligent and entirely unscrupulous men, is not so much a national blessing as a national menace.*

Moreover, the leading authorities are in practical agreement in holding that, to the solid business and industrial interests of the country, far more important than all other considerations are : first, stable rates, so that business men can plan ahead and make contracts without fear of a rise in rates forcing them to fulfil their contracts at a loss ; and secondly, the same rates for everybody, the total abolition of rebates and other forms of discrimination which build up individuals,

companies, cities, or sections of the country, to the ruin of their less favoured competitors. The power of certain men to change rates arbitrarily, to give special rates to friends or business allies, to refuse such rates, and at critical periods even to refuse cars at any price to competitors, injects an element of uncertainty into the business world, which is like a poison in the blood. This arbitrary power tends to make business success dependent not so much upon industry, will-power, insight, and organizing ability, as upon a slimy capacity for intrigue, and a corrupt Machiavellian ability to pull wires and make dishonest deals for the purpose of spoiling alike competitors and the public. The business world, under these conditions, becomes not an open field where merit wins, but a baleful and bewildering arena where conspirators struggle in the dark, and where, as often as not, merit goes down from a knife-thrust in the back.

The *supreme* advantage of Government roads therefore would seem to consist not so much in the lowering of rates, the amelioration of the conditions of labour, improvements in the service, &c., but in the emancipation of the people, rich and poor alike, from their present economic subjection to the irresponsible power of railway magnates. It is not only incredible, but quite impossible, that a nation which has achieved its political freedom should long consent to this insolent and intolerable form of industrial tyranny.

For some years the American people have been engaged in an experiment with Government control of private railways, an experiment which never yet has

proved permanently satisfactory in any country in the world, but which, on the contrary, has been given up by one country after another in favour of the simpler plan of Government ownership and management. If our railway magnates had foresight and commonsense 'but as a grain of mustard seed', they would do their utmost to co-operate with the Government in making that control satisfactory to the American people as long as possible, for the moment it becomes apparent that this control is a failure, that moment ultimate Government ownership in America is assured, and its coming is as certain as the movements of the tides.

At such a psychological crisis it would be idle to repeat the threadbare assertion which so long has served as a substitute for sound argument, that 'however it might be elsewhere, Government roads in America would prove a costly luxury'. The people would only reply, 'So be it! If only Government roads can give us economic freedom from railway tyranny, then are they a "luxury" that is infinitely desirable, a "luxury" that not only every nation can afford, but that no self-respecting nation can afford to be without, a "luxury" as necessary as are the police that insure our domestic tranquillity, or the army and navy which guard us against external aggression.'

When liberty, either political or industrial, is at stake, nations do not haggle about the price. Cost what it may, in time, in money, or even in blood, a virile people can always afford to be free.

APPENDIX I

LAMARTINE'S WARNING

‘Ан, gentlemen!’ he cried,¹ ‘there is a sentiment which has always powerfully moved me while reading history or looking at facts—and that is a horror of corporations, the sense of the incompatibility of sincere and progressive liberty with the existence within a state or a civilization of such bodies. I realize that this is not the prevailing idea, which, on the contrary, attributes to them a sort of correlation with liberty. But without realizing it, in this case, one has in mind aristocratic and not democratic liberty, for if such bodies resist those who are above them they oppress with the same energy those who are underneath. This is the most odious of tyrannies, because it is the most durable—the tyranny with a thousand heads, a thousand lives, a thousand roots, the tyranny which can neither be broken, killed, nor extirpated. It is the best form that oppression has ever been able to assume in order to destroy alike individuals and our collective interests. When once you have created them or allowed them to be born, henceforth they are your masters for centuries. Corporations or that which resembles them, combined interests recognized by law and organized, amount to the same thing—the subjugation prompt, inevitable, and perpetual of all other interests. It is no longer possible to touch them or they will utter a cry frightening or unsettling every one about them. They must be counted with ; for those interests which are scattered, isolated, without solidarity, without unity of action, always succumb, inevitably succumb, before interests that have consolidated.

‘Free governments are no more exempt from these influences than others ; they insinuate themselves everywhere—in the press, in public opinion, and in the body politic, finding everywhere associates and allies. Their cause has as many supporters as there are people interested therein. Have we not too many deplorable examples of this before our eyes ?

¹ Chamber of Deputies, May 10, 1838.

Do we not see the entire agricultural and commercial interests of the country oppressed by the combination of a small number of iron-workers, of factory-owners, of industrial concerns favoured by bounties, by tariffs which protect only themselves and prove ruinous to every one else? We revolt in vain, we are in their hands, they possess us, they oppress us, and France impotently submits to a loss of from three to four hundred millions a year because to certain special interests of this nature she once allowed rights which to-day she cannot, or dare not, take from them. Sixty or eighty iron manufacturers, with impunity, tyrannize over the whole country.

'Great God! What will be our condition when, according to your imprudent system, you shall have constituted into a unified interest with industrial and financial corporations the innumerable stockholders of the five or six billions of securities which the organization of your railroads will place in the hands of these companies?

'You, the partisans of the liberty and enfranchisement of the masses, you, who have overthrown feudalism and its tolls, its rights of the past and its boundaries, you are about to allow the railroads to fetter the people and divide up the country among a new feudality, a moneyed aristocracy. Never a government, never a nation has constituted outside of itself a more oppressive money power, a more menacing and encroaching political power than you are going to create in delivering up your soil, your administration, and five or six billions of securities to your private railroad companies.

'I prophesy with certainty that, if you do this, they will be masters of the Government before ten years!'

All his eloquence, however, seemed in vain, for, as a result of the discussion, the proposition presented by the Ministry, February 18, 1838, providing for the construction by the State of several important lines, was defeated, and a number of immensely valuable franchises were granted to private companies. Not until they had devoted nearly three-quarters of a century to unsatisfactory experimentation with private railway monopoly, did the French people at last come to see that Lamartine was right, and that the highest welfare of France demanded the nationalization of their great iron highways.

APPENDIX II

FEDERAL LAW ON THE SYSTEM OF ACCOUNTING TO BE FOLLOWED BY SWISS RAILWAY COMPANIES

(LAW OF DECEMBER 21, 1883.)

Art. 1. The accounts and balance-sheets of all railway companies, having their head offices in Switzerland shall be kept according to the provisions of the Code of Obligations, in so far as the present law does not contain special provisions contrary thereto.

Art. 2. All sums used for the construction or the acquisition of a line or the purchase of operating material may be included in the assets on the balance-sheet.

In case of acquisition by contract of a line belonging to another concern at a price lower than that entered on the preceding balance-sheet, the valuation in the following balance-sheet shall not exceed the purchase price ; in case the latter is in excess of that valuation, the figure of the previous balance-sheet must not be exceeded.

The cost of organization and administration as well as interest accruing during the period of construction on capital expenditure for the building and equipping of the line, are to be treated as part of capital cost. The latter shall, however, not include the cost of promotion.

Art. 3. After the line has been opened for traffic, the amounts expended for additional or new construction or for the purchase of operating material may be included in the assets on the balance-sheet only in case they constitute an increase or an essential improvement of the existing constructions and equipment with a view to their improved operation.

The cost of maintaining existing constructions and equipment, as well as of replacing those worn out or destroyed, shall be defrayed out of the yearly receipts or of special funds existing for these purposes. With the authorization of the

Federal Council the companies may, however, distribute over a period of several years expenditures of exceptional character.

The sums destined for the reserved and renewal funds shall be taken out of the net earnings, and the respective amounts shall be determined in the by-laws.

Art. 4. The amounts entered as capital cost in contravention to Art. 2 and which are to be eliminated from the balance-sheet, shall be liquidated out of the yearly net receipts.

The companies shall submit their plans of amortization to the Federal Council, which shall prescribe the total amounts to be liquidated and shall also fix the period and annual quota of liquidation.

Losses in quotations of bonds of unpaid loans, shall be made up during the period of the loan—due regard being had to the period it has been running. The Federal Council shall fix the periods for the other items.

It shall not be obligatory for the companies to make up the losses sustained by them up to the date of this Act in the issue of their stock.

Art. 5. The annual accounts and balance-sheets shall be submitted previous to the general meeting of the stockholders to the Federal Council which shall determine whether they are in accord with the provisions of the present law and the by-laws of the companies. To this effect, the Federal Council shall have the power to examine and look into all matters pertaining to the management of the companies and to undertake all other necessary inquiries.

In case the Federal Council finds that a balance-sheet does not conform to the requirements of the law, and the company does not accept the changes demanded by the Federal Council or refuses to execute the measures ordered by the same in conformity with Art. 4 of the present law, the Federal Council may within thirty days after being informed of the decision of the general assembly of the stockholders, bring the controversy before the Federal Tribunal for final decision.

The form of procedure for the contesting parties shall be that observed in litigations of public character.

All distribution of dividends shall be suspended until the expiration of the above-named period of thirty days, and in case of appeal, until after the decision of the Federal Court.

Art. 6. In derogation of the provisions of the Code of Obligations, the rights vested at present in the confederation

and the cantons towards the individual railway companies, with regard to rights of vote or management, shall remain unimpaired.

Similar rights may be established in the future by the Federal authorities either by making them part of the franchise or by approving the by-laws of the companies or their conventions.

TRANSITORY PROVISIONS

1. Immediately upon the entering into effect of the present law, the Federal Council shall open negotiations with the railway companies with a view to determining by way of friendly agreement, the total amount of cost which may be entered among the assets of the balance-sheet in accordance with Art. 2.

2. In case the agreement contemplated in the preceding article cannot be reached, the Federal Court shall decide the matter according to the provisions of the Code of Obligations and of the present law.

3. The provisions in the franchises pertaining to arbitration for the purpose of determining capital cost in case of purchase shall remain unaffected.

4. The by-laws of the railway companies shall be brought in conformity with the present law prior to January 1, 1885. Beginning with that date the provisions of the Code of Obligations (Arts. 671 to 675) regarding liabilities shall become applicable to railway companies.

5. The Federal Council shall cause the promulgation of this law and fix the date when it is to go into effect in accordance with the provisions of the Federal Law of June 17, 1874, concerning the popular vote on Federal laws and enactments.

So decreed by the National Council.

Berne, December 21, 1883.

President : DR. S. KAISER.

Secretary : RINGIER.

So decreed by the Council of States.

Berne, December 21, 1883.

President : HAUSER.

Secretary : SCHATZMANN.

The Federal Council decrees : The above Federal Law promulgated December 29, 1883, shall, in conformity with

Art. 89 of the Federal Constitution become effective and be in force beginning with April 15, 1884.

Berne, April 4, 1884.

In the name of the Swiss Federal Council :

The President of the Confederation :

WELTI.

The Chancellor of the Confederation :

RINGIER.

APPENDIX III

FEDERAL LAW ON METHODS OF ACCOUNTING TO BE USED BY SWISS RAILWAYS

(APPROVED MARCH 27, 1896)

THE FEDERAL ASSEMBLY OF THE SWISS CONFEDERATION, AFTER
CONSIDERATION OF THE MESSAGE OF THE FEDERAL COUNCIL
OF NOVEMBER 11, 1895, DECREES :

GENERAL REGULATIONS

Art. 1. The methods of accounting of all railways located in Switzerland are subject to the provisions of the present law. Except in cases where other rules are expressly laid down by international treaties, the aforesaid provision is applicable also to such railway lines, located in Switzerland, as may belong to foreign concerns or as may be operated by them.

Unless otherwise ordered by the present law, the rules of the Federal Code on obligations are applicable also to stock companies (private corporations).

The provisions of Arts. 11 to 14 of the present law are not applicable to lines which belong to Cantons or to foreign concerns.

Art. 2. Accounts and balance sheets shall be drawn up according to uniform schedules and forms prescribed by the Federal Council ; they shall be closed every year on the 31st day of December, and submitted to the Federal Council for examination (Art. 15) and approval, within a period to be fixed by said Council. In cases where the concern is a private corporation (stock company), the submission of these reports must in every case precede the general meeting of the stockholders.

New railway enterprises shall close and submit their accounts and balance sheets for the first time at the close of the year in which they began to operate parts of the line or the entire line. The Federal Council, however, has the power to require that

accounts be submitted to it even during the period of construction.

Art. 3. On demand of the Federal Council, all railway concerns shall draw up and present, together with the accounts and balance sheets relating to the entire system of lines, distinct exhibits of the net earnings, and the aggregate capital of those lines which, under the terms of their charters, may be separately bought out.

If, by virtue of the charter, all the lines of a concern form an indivisible whole, or if, *by virtue of an agreement with the Federal authorities*, lines which, according to their original charters, were distinct, have been combined so as to form the object of a single purchase, then the respective corporations are no longer bound to draw up, for each line separately, accounts relating to the net earnings and the aggregate capital; in such case the exhibit of the net earnings and of capital, required by the conditions of purchase, is to be prepared for the whole of the system only.

If any railway concern shall fail to submit, within the period prescribed (Art. 19), the separate accounts provided for by its charter, the Federal Council may order the execution of the measures provided for in Arts. 18 and 19, and may, furthermore, declare the whole of the lines of the concern as forming an indivisible unit with respect to purchase. In such case the earliest date of purchase is fixed for the first of May, 1903, and the purchase price shall be equal to twenty-five times the average net earnings for the ten years involved, or else to the aggregate capital of the entire system; in cases of purchases at a later date the methods of determining compensation shall conform to the terms of that charter which covers the greatest length of line.

ACCOUNT OF CONSTRUCTION

Art. 4. The account of construction of a railway concern may, always with due regard for the provisions of Arts. 6 and 9, be charged with all the expense which the chartered corporation may have incurred for the building or the purchase of the line and for the acquisition of the equipment.

In case of acquisition by contract of a line belonging to another concern, the value to be entered on the balance-sheet shall not exceed the purchase price, if the latter is lower than

the previous valuation ; if it exceeds that valuation, the figure of the previous balance-sheet shall not be exceeded.

To the cost of the physical property shall be added the expense of organization and administration, and the interest accruing during the period of construction for the building and equipping of a line. The dividends on stock shall be added to the cost of construction only in case the payment thereof has been stipulated by the regulations or by agreement. The rate of interest to be charged to the construction account shall not exceed the rate of interest on the capital used in connection with said enterprise.

For lines newly constructed, the expenses for the grading and ballasting of the track, in so far as they exceed the normal cost of maintenance, may be charged to the construction account during the first six months of operation.

Art. 5. After the line has been opened for traffic, the amounts expended for new or additional constructions or for the purchase of operating material, shall be charged to the construction account only in case they constitute an essential increase or improvement of the existing constructions and equipment, with the view to their improved operation.

The expense resulting from the improvement or reinforcement of the superstructure shall not be charged to the construction account.

As regards the works and purchases contemplated in the present article, no cost of organization, administration, or technical management shall be charged to the construction account unless these operations shall have caused special expenditures not within the scope of the operation or maintenance of the railways.

Art. 6. The value of constructions and equipment discarded, or which have disappeared, if charged to the construction account, shall be deducted therefrom.

If new constructions and equipment replace those whose use has ceased, their value may be charged to the construction account.

In case the superstructure (track) is renewed, the cost of its first establishment is not to be deducted from the construction account. On the other hand, the construction account shall not be charged with the cost of the renewal of the superstructure.

Art. 7. For the transportation, by a railway concern, over its own lines, of articles needed for its own work of construction,

the construction account shall not be charged with more than actual cost. A special regulation, to be submitted for the approval of the Federal Council, shall fix the rates to be applied to this class of transportation.

It is unlawful for a concern to add any profit to the cost of furnishing material or labour, for construction, on its own system of lines.

Art. 8. Plans and estimates of any work of new or supplemental construction and of all purchases of rolling stock made after the opening of a line to traffic, shall be submitted to the Federal Council before said work or purchases are carried into effect. In case this regulation is not observed, expenditures of this nature shall not be charged to the construction account.

Art. 9. The following-named expenditures and losses shall not be charged to the construction account :

- (a) The cost of organization, in particular the expenditures incurred in order to obtain the charter, the cost of organizing the company, and expenditures for preliminary studies and plans.
- (b) Any expenditures connected with the raising and collecting of the capital and any losses in market quotations.
- (c) Any subsidies or contributions furnished for other railways, as well as for roads, bridges, or buildings situated outside of the territory of the railway itself, or which continue to be the property of third parties, even when the railway concern itself at its own cost carries out works of this kind.
- (d) The cost of constructions and equipment covered by free subventions and grants (subventions à fonds perdus).
- (e) The cost of organizing and instituting the operation.
- (f) All expenditures not designated in this article, which under the terms of the present law (Arts. 4 to 8), are not admitted in the construction account.

Free subventions and grants (subventions à fonds perdus) received by a railway concern shall not be entered on its balance-sheet.

OPERATING ACCOUNT

Renewal Fund. Sinking Fund

Art. 10. The accounts of railway concerns shall comprise all receipts and expenditures relating to the respective year, even when the actual payment therein entered has not yet been made.

The cost of maintenance of existing constructions and equipment is to be defrayed out of the current receipts of operation.

The interest on debts, the legally prescribed charges on account of renewal fund, the charges on account of other funds provided by the charter provisions or regulations, as well as the prescribed charges on account of amortization, shall be entered every year among the expenditures under the head of profit and loss, even when the receipts of operation do not suffice to cover them.

Art. 11. There shall be established a renewal fund for constructions and equipment subject to substantial wear, to wit, the track, the rolling stock, furniture, and tools. For electric railways, cable railways, tramways, &c., the establishment of a renewal fund shall extend to the means of operation and the respective equipment used in place of locomotives.

The annual charges to be made on account of this fund shall be calculated from the cost of construction or the purchase price and the probable duration of the use of the individual constructions and articles; they shall be entered under the head of profit and loss, as an expenditure of operation.

No interest shall be credited to the renewal fund.

The renewal fund shall exhibit at all times the full equivalent of the loss in material value suffered in consequence of wear and other causes, by the constructions and articles mentioned in the first paragraph of the present article. The amount of the renewal fund thus calculated shall be entered in the liability column of the balance-sheet. The difference between the total amounts thus entered and the total entered to the credit of this fund shall be treated in accordance with Arts. 13 and 14.

Art. 12. The Federal Council, after consultation with the managements of railways, shall determine the amounts of the annual charges to be made on account of the renewal fund.

These charges are determined more specially, in conformity with the orders of the Federal Council, by the charter provisions, or by special regulations. The renewal fund may be used only for purposes named in the charter provisions or the regulations. The determination of these purposes is subject to the approval of the Federal Council.

Railway concerns have the right of appeal to the Federal Tribunal against decisions or decrees passed by the Federal Council by virtue of the present article. The procedure to be followed is regulated by the provisions contained in Art. 16 of the present law.

Art. 13. The excess amounts due on account of the renewal fund in Art. 11, par. 4, as well as all the items which, under the terms of the present law, cannot be charged to the construction account and do not constitute real assets, shall provisionally be entered on the asset side of the balance-sheet under the head of amounts to be compensated; they shall be covered from the annual receipts of operation.

Art. 14. The Federal Council, on being made cognizant of a plan of amortization, shall definitely fix the period within which that operation shall take place and the amounts of the annual payments. The following rules shall be observed in this respect:

The losses in market value on loans not yet repaid shall be compensated during the continuance of the respective loan periods.

The subsidies and contributions referred to in Art. 3, letter c, shall be set off during the franchise period in equal payments.

The Federal Council shall fix the period of amortization of the other items, including the supplementary transfers to the renewal fund, the losses in market value on shares or on loans repaid or converted before they are due.

Auditing of Accounts. Penalties

Art. 15. The Federal Council shall ascertain whether the accounts and balances, the special exhibits of the net earnings and of the aggregate capital, presented by the managements of railways, comply with the provisions of the present law, with the rules and regulations of the railway concerns, and with their charters. With this view, the Council is authorized to take cognizance of all matters relating to the management of railway administrations and to make all necessary inquiries.

Art. 16. In case the Federal Council deems that the

accounts, the balance-sheets, and the statements of net earnings and of the capital to be exhibited according to the charters, do not comply with the provisions of law, rules, and regulations, or with the terms of the charters, it shall take the necessary measures, after hearing the managements of the railways.

Apart from cases referred to in Art. 14, railway concerns have the right to appeal to the Federal Tribunal, within thirty days from date of notice, against any measures taken by the Federal Council, and to submit the questions under contest to that tribunal, whose decision shall be final.

The procedure, in case of such appeal, shall be that prescribed for suits involving questions of public law. In all cases the Federal Tribunal shall decide which of the contestants shall bear the cost of expert testimony.

Art. 17. No dividends shall be distributed until the Federal Council shall have approved the accounts and the balance-sheet. If any contest shall arise in regard to the fixation or the use of the net earnings, the amount under contest shall be placed in reserve, conformably to the orders of the Federal Council, until such time as the Federal Court has rendered its decision.

Art. 18. In case any railway management shall fail to present, within the required period, the accounts, balance-sheets, and other exhibits that have been lawfully demanded of it, the Federal Council may proceed to the necessary inquiries and examinations at the cost of the railway.

In case any railway concern is repeatedly tardy, or in case it contravenes or evades the provisions of the present law, the management guilty of such transgression may furthermore be condemned to pay a fine not to exceed ten thousand francs. The fine shall be imposed by the Federal Criminal Court.

There is, moreover, reserved the application of the procedure laid down in Art. 28 of the Federal Law of December 23, 1872, concerning the construction and operation of railways.

Art. 19. For lines which may be purchased by the Confederation in 1903, by virtue of the provisions in their charters or by voluntary agreement, there shall be presented, at the end of 1896 at the latest, conformably to Art. 3 of the present law, exhibits of their net earnings and capital for the years 1888 to 1895, calculated in conformity with the clauses of their charters. For subsequent years, these exhibits shall be annexed to the annual accounts and balance-sheets. In

cases of other dates of purchase, the Federal Council shall fix the period within which the special accounts required by the charters shall be presented.

The obligation to present these accounts or exhibits extends also to the period that elapses between the announcement of the purchase and the actual transfer of the railway.

The Federal Council has the power to refuse to examine and approve the accounts and balance-sheets that are not accompanied by the required exhibits, until these exhibits are forthcoming, and to prohibit until then all distribution of dividends.

Determination of the Purchase Value

Art. 20. As soon as the present law takes effect, the Federal Council shall enter into negotiations with the railway management in order to fix, by mutual consent, in conformity with the present law, the sums which, for the fiscal years elapsed, may be credited to the construction account and those which are to be credited to the renewal account.

The Federal Council shall try furthermore to come to an agreement with the railway managements in regard to the rules according to which the net earnings and the capital shall be determined in conformity with the charters.

If no agreement is arrived at, the Federal Council shall decide the points at issue on the basis of the accounts and exhibits produced. The railway managements have the right, by virtue of Art. 16 of the present law, to appeal to the Federal Tribunal against decisions of this nature.

Art. 21. The Federal Tribunal takes cognizance of all cases which, under the terms of the clauses regarding purchase contained in the charters, are subject to arbitration. The procedure provided in Chapter II, Number 1 of the Federal Procedure Law is applicable in such cases, according to which the Federal Tribunal is the court of sole instance in suits brought by a railway corporation.

The clauses of the charters providing for the establishment of tribunals of arbitration charged with the determination of the purchase price and with the decision of all other controversial matter relating to purchase, are herewith repealed.

Final Provisions

Art. 22. In derogation of the provisions of the Federal Code on obligations, the confederation and the cantons retain the rights which they at present enjoy toward certain railway

corporations in the matter of the right to vote. The Federal authorities shall have the power of stipulating or sanctioning similar rights in the future, either in the charters or at the time of examination of the regulations or special agreements.

Art. 23. The regulations of railway companies shall be made to conform to the provisions of the present law within a period to be fixed by the Federal Council.

Art. 24. The Federal Law of December 21, 1883, on the accounting of railway companies, is herewith repealed.

The conventions entered into by virtue of the provisions of the law of 1883 in regard to amortization, shall be modified in accordance with the provisions of the present law. In determining new modes of amortization compliance shall be had with the provisions of the present law concerning the supplementary transfers to the renewal fund. However, the decisions of the Federal Council relating to amortization shall have no retroactive effect.

The provisions of the present law do not apply retroactively to construction accounts modified in conformity with the law of 1883 and approved by the Federal Council.

Until a new law shall have been promulgated relating to secondary railways, the Federal Council is authorized, in the application of the present law, to grant to these railways all possible alleviations, taking into account the special circumstances affecting these railways, particularly in determining the regular transfers to be made to the renewal fund as well as the terms of amortization of such items of transfer as may be in arrears.

Art. 25. Conformably to the provisions of the Federal Law of June 11, 1874, concerning the referendum vote on Federal laws and decrees, the Federal Council is charged with the promulgation of the present law and with the determination of the time when it shall take effect.

Thus decreed by the Council of States,
Berne, March 26, 1896.

The President : JORDAN-MARTIN.
The Secretary : SCHATZMANN.

Thus decreed by the National Council,
Berne, March 27, 1896.

The President : STOCKMAR.
The Secretary : RINGIER.

THE FEDERAL DECREES

The above Federal Law promulgated on April 1, 1896, and accepted by the people in its vote of the 4th instant, shall be inserted in the Collection of Laws of the Confederation and shall take effect on November 1, 1896.

Berne, October 20, 1896.

In the name of the Swiss Federal Council :

The President of the Confederation :

A. LACHENAL.

The Chancellor of the Confederation :

RINGIER.

APPENDIX IV

FEDERAL LAW OF OCTOBER 15, 1897, REGARDING THE ACQUISITION AND OPERATION OF THE RAILWAYS ON ACCOUNT OF THE CONFEDERA- TION AND THE ORGANIZATION OF THE ADMINIS- TRATION OF THE SWISS FEDERAL RAILWAYS.

The Federal Assembly of the Swiss Federation having duly considered the message of the Federal Council of March 25, 1897, and in conformity with Articles 23 and 26 of the Federal Constitution, decrees as follows :

I. ACQUISITION AND OPERATION OF RAILWAYS ON ACCOUNT OF THE CONFEDERATION

Art. 1. The Confederation shall acquire and operate on its account under the name of 'Swiss Federal Railways' those Swiss railways, which because of their economic or strategic importance serve the interests of the entire Confederation or a considerable part thereof, and whose acquisition can be effected without undue sacrifice (expense).

Together with a railway the Confederation may also acquire the holdings of the former in secondary lines, also its subsidiary business undertakings (steamboat enterprises, &c.), which are closely related to the operation of the railway.

Art. 2. The acquisition of railways shall take place by means of purchase in accordance with Federal Legislation and the franchises.

The Federal Council shall accordingly give notice of the purchase at the nearest term of purchase to the following railway lines in operation at the time the present law becomes effective :

First. The Jura-Simplon Railway.

Second. The Swiss Central Railway including its share of the commonly owned lines.

Third. The Swiss North-East Railway including its share of the commonly owned lines.

Fourth. The railway enterprise Wohlen-Bremgarten as far as the share of the Municipality of Bremgarten is concerned.

Fifth. The United Swiss Railways.

Sixth. The Gotthard Railway.

In case the purchase of the entire North-East system cannot be arranged on the basis of the provisions applicable to the main line, the Federal Council may exclude from the purchase those lines which are operated under separate franchises, but whose acquisition could be effected only with undue sacrifices and the possession of which is not indispensable for the proper operation of the Federal railways.

The Federal Council with the sanction of the Federal Assembly is authorized to effect the purchase of the above-mentioned lines also by mutual agreement with the companies; in this case the fixation of the purchase price shall conform to the provisions of the Federal Legislation and of the franchises.

Art. 3. The Federal Council is also authorized with the approval of the Federal Assembly to acquire other existing railways provided they conform to the conditions mentioned in Art. 1.

Art. 4. In case the Confederation proposes in the future to acquire railway lines other than those enumerated in Articles 2 and 3 or proposes to construct new lines, a special federal law shall be passed for each case of purchase or construction.

Art. 5. The Federal Council is authorized with the approval of the Federal Assembly to take over the operation of secondary lines as well as to assume the obligations resulting from working agreements existing between the said principal and secondary lines.

Art. 6. The transfer of ownership of the railways acquired by the Confederation shall take place for each of them at the time fixed in the franchise or in the convention, without the necessity of observing the general formalities required for the transfer of ownership.

No taxes or fees shall be levied other than the proper fees for the entry in the public registers of the transfer of ownership.

Art. 7. The funds required for the acquisition, the construction, and the operation of the railways, shall be procured by means of loans through the issue of bonds or annuities ('obligations ou des titres de rente').

These loans are to be repaid according to a fixed amortization plan, at the latest within sixty years.

By mutual agreement with the owners of the roads and in observance of the general principle of the debt amortization within a period not to exceed sixty years, some other mode of payment for the acquisition of the railways may be chosen.

The sanction of the loan operations and of the plan of amortization is reserved to the Federal Assembly.

Art. 8. The accounts of the Federal railways shall be separated from those of the other branches of the Federal Administration, and be kept in such a manner that the exact financial situation can be determined at any time.

The net income of the Federal railways is to be used in the first place for the payment of interest on and the amortization of the railroad debt.

Out of the further surplus 20 per cent shall be paid into a special reserve fund, to be kept separate from the other assets of the Federal railways until this fund including the accrued interest shall have attained the amount of fifty million francs. The remaining eighty per cent are to be employed in behalf of the Federal railways, in improving the transportation facilities and notably in reducing proportionally passenger and freight rates, and in extending the Swiss railway system—particularly its secondary lines.

In case the ordinary revenues, including the balance of the surplus carried forward from the previous year, are not sufficient to defray the expenses of operation and to pay the interest and amortization charges, a corresponding amount is to be taken from the reserve fund.

Art. 9. With the transfer of a railway to the Confederation all the provisions of the respective franchises become void, except obligations of a private nature in favour of third persons that may be contained therein and regarding which these persons may seek settlement exclusively with the former holders of the franchises. Obligations resulting from the franchises which affect immediately the existence and operation of the railways, shall be taken over by the Confederation.

Art. 10. The Federal railways are exempted from all taxation by the cantons and the communes.

This provision does not, however, apply to real estate which, while owned by the Federal railways, is not essential for their operation.

The Federal railways are not subject to the legal enact-

ments of the cantons regarding the insurance of their rolling stock.

The Confederation renounces its right to demand from the Federal railways the franchise tax for the regular periodic transportation of passengers, according to Art. 19 of the Federal law regarding the construction and operation of railways of December 23, 1872.

Art. 11. The existing Federal railway legislation is also applicable to the Federal railways in the measure, as it is compatible with the provisions of this Act.

II. ORGANIZATION OF THE ADMINISTRATION OF THE SWISS FEDERAL RAILWAYS

Art. 12. The administration of the Federal railways forms a separate division of the Federal administration.

The officials and employees of the Federal railways are subject to the laws relating to the Federal officials.

The administration of the Federal railways has its legal domicile at the place where the Central Board of Directors is located.

The latter shall also choose a domicile in the capital of each canton touched by its lines, at which place it may be proceeded against by the inhabitants of the respective cantons.

Actions concerning real estate shall be brought before the Tribunal where the real estate is located.

The proceedings in and adjudication of civil actions against the Federal railways are subject to the existing cantonal and federal laws, provided, however, that the Federal Supreme Court shall be the Court of single instance in matters where the cause of action represents a capital value of at least thirty thousand francs.

I. THE SUPREME MANAGEMENT OF THE ADMINISTRATION

Art. 13. The following provisions regulate the supreme management of the administration by the Federal authorities :

A. *The Federal Assembly has cognizance of the following matters :*

1. The ratification of loan operations and of plans of amortization.

2. The ratification of contracts relating to the acquisition of other existing lines, as well as to the taking over of the

operation of secondary railways and the assumption by the Confederation of existing contracts of operation between the principal railways mentioned in Art. 2 and secondary railways.

3. Legislation establishing the general principles governing railway rates.

4. The elaboration of laws having for their object the acquisition and the construction of railways.

5. Legislation concerning salaries.

6. The approval of the annual budgets.

7. The examination and approval of the annual accounts and the report of the management.

B. The Federal Council has cognizance of the following matters :

1. The elaboration of regulations for the execution of the present Act.

2. The selection

(a) Of 25 members of the Federal Administrative Council. (Art. 16.)

(b) Of the members of the Central Board and the District Board of Directors. (Arts. 23 and 33.)

(c) Of four members of each District Administrative Council. (Art. 29.)

3. The presentation to the Federal Chambers of

(a) The annual budget, accounts and Report.

(b) Bills regarding the taking over by the Confederation of the operation of secondary lines, and the assuming by it of contracts of operation that may be in force between the main lines as mentioned in Art. 2 and secondary lines. (Art. 5.)

(c) Bills regarding the construction of new lines and the acquisition of existing lines.

4. The exercise of the same prerogatives which the Federal Council actually possesses with regard to private railways, so far as there may still remain occasion for the exercise of these prerogatives in connection with the Federal railways.

5. The approval of the regulations relating to pension and relief funds for the officials and permanent employees.

6. The elaboration of regulations relating to the creation of sick benefit funds.

2. DIVISION OF THE RAILWAY SYSTEM

Art. 14. The Federal railway system shall be divided into five districts with the principal offices at Lausanne, Basle, Lucerne, Zurich and Saint Gall.

The limits of each of these districts shall be fixed by the regulations for the execution of this Act.

3. ORGANS OF THE ADMINISTRATION

Art. 15. The following are the organs of the administration of the Federal railways :

- (a) The Administrative Council.
- (b) The Central Board of Directors.
- (c) The District Railway Councils.
- (d) The District Boards of Directors.

(a) The Administrative Council.

Art. 16. The Administrative Council shall be composed of fifty-five members who are chosen as follows :

25 by the Federal Council.

25 by the cantons and half-cantons.

5 by the District Railway Councils, from their midst.

Of the members to be chosen by the Federal Council not more than nine shall be members of either Federal Chamber.

The Federal Council proceeds to the election of its members only after the cantons and the District Railway Councils shall have elected their members. Due regard shall be had in the election that agriculture, commerce and industry shall be suitably represented. The members of the Administrative Council shall hold office for three years, and their term of office coincides with that of the Federal authorities.

Art. 17. The Administrative Council shall have cognizance of the following matters :

1. The supervision of the entire administration.

2. The elaboration of the draft of the annual budget to be submitted to the Federal Council.

3. The examination of the yearly accounts prepared by the Central Board of Directors, and of the annual report prepared by the same body prior to their transmittal to the Federal Council.

4. The elaboration of the general rules governing the

tariffs and the classification of merchandise together with the executive regulations, all within the limits of the respective legislative provisions.

5. The elaboration of the general rules in regulation of train schedules (classification of trains, number of trips, rate of speed, &c.).

6. The assuming of operation under lease of lines which are not owned by the Confederation, the leasing of the operation of lines owned by the Confederation, and the institution of subsidiary undertakings.

7. The ratification of the more important conventions with other transportation enterprises regarding reciprocal traffic and the regulation of competitive traffic.

8. The ratification of conventions with other railway enterprises, regarding the common use of terminals, stations and railway tracks, as well as the common use of other transportation facilities.

9. The adoption of normal types for road-beds, permanent way, and superstructure, also for the rolling stock.

10. The decisions regarding the tracing of new lines, the elaboration of plans for new depôts of importance and of plans for larger alterations and additions on lines in operation.

11. The approval of contracts of constructions and delivery amounting to over 500,000 francs.

12. The purchase of real estate, the acquisition of which is not required for railway purposes, in case the purchase price exceeds 200,000 francs, also the sale of real estate whose value exceeds 50,000 francs.

13. The elaboration of the rules of the organization of the service in conformity with the regulations in execution of the present Act as elaborated by the Federal Council.

14. The proposal of names of persons for membership on the Central and District Boards of Directors.

15. The confirmation of the nominations of the chiefs of divisions at the Central and District Boards of Directors.

16. The fixing of salaries of the officials named in par. 15 within the limits of the law relating to salaries and of the budget.

17. The adoption of the general rules to govern the employment of the personnel.

18. The elaboration of the rules and regulations pertaining to the pension and relief funds.

19. The examination of proposals originating with the District Railway Councils regarding improvements of operation.

20. The rendering of expert opinion regarding proposed changes in the laws and regulations affecting the Federal railways.

21. The rendering of expert opinion regarding propositions for the construction of new lines on account of the Confederation.

Art. 18. The Administrative Council elects from its midst a president and a vice-president for its term of service.

Art. 19. For the preliminary discussion of questions the Administrative Council appoints for its term of service a standing committee, composed of the president of the Administrative Council as chairman and six to ten members. The Administrative Council, however, shall have the power in exceptional cases to appoint special committees for the preliminary discussion of special matters.

The standing as well as the special committees shall have the right to require of the Central Board of Directors all the information regarding the subjects under discussion which they deem necessary. They shall also have the right of inspecting all the documents pertaining to those subjects.

The committees are permitted to call in a secretary who shall be furnished by the office of the Secretary of the Central Board of Directors.

Art. 20. The members of the Central Board of Directors and the Presidents of the District Boards assist in an advisory capacity at the deliberations of the Administrative Council unless these deliberations may involve their personal interests.

In the deliberations of the standing committee the Central Board is represented by its president or vice-president acting in an advisory capacity.

The Central Board of Directors may, if deemed advisable, delegate to the deliberations of the special committees certain of its members in an advisory capacity.

Art. 21. The Administrative Council meets regularly once every quarter of the year at the call of its president. It is also convened whenever business matters require it, or in case at least one-fourth of its members request it. Particulars regarding the time of the meetings shall be stated in the regulations in execution of the present law.

A majority of the members present shall constitute a quorum of the Council.

Art. 22. The members of the Administrative Council receive for their services per diem and travelling compensation, the amounts to be fixed by the Federal Assembly.

(b) The Central Board of Directors.

Art. 23. The Central Board of Directors shall be composed of from five to seven members, who are nominated by the Administrative Council and confirmed by the Federal Council. The latter, however, is not bound in its choice by the nominations.

Their term of service is six years and coincides with two terms of service of the members of the Federal Chambers.

The seat of the Central Board of Directors is Berne.

The members shall have their actual domicile in Berne.

Art. 24. The Federal Council appoints from among the members a president and a vice-president for a term of three years each.

Art. 25. The Central Board of Directors has entire charge of the business management subject to the exceptions or limitations contained in the present law and saving the attributions of the Administrative Council, as enumerated in Art. 17. In particular its scope of functions comprises the following matters :

1. The administrative and judicial representation of the railway management as against outsiders, in so far as these powers are not vested in the District Councils (Art. 35, par. 1).
2. The appointment of all officials and employees, immediately subordinated to it, also of the chiefs of divisions at the District Boards upon the nomination of the latter, which nomination however shall not be binding upon the Central Board.
3. The fixing of the rates of salary for the officials and employees that may be nominated by the Central and District Boards.
4. The fixing of salaries for the officials and employees nominated by it within the limits set by the law regarding the salaries and the budget.
5. The preparation of the annual budget.
6. The preparation of the yearly accounts.
7. The preparation of the annual reports regarding the business management.
8. The preliminary discussion of all other matters not above mentioned prior to their deliberation by the Administrative Council.

9. The execution of the decisions of the Administrative Council.
10. The elaboration of the tariffs.
11. The control of the revenue from operation.
12. The settling of claims resulting from traffic relations with other railways for the erroneous application of tariffs and tariff regulations, or for false routing, also of claims for the loss of or damage to merchandise transported, or complaints about delays of passenger and freight trains, in so far as these matters are not transferred by the regulations of the Federal Council to the jurisdiction of the District Boards or of other administrative bodies.
13. The elaboration of train schedules and the control over their application by the District Boards in a manner conforming to the needs of through traffic.
14. The central control over the car service.
15. The execution of new constructions and additions in so far as they are not left to the District Boards.
16. The conclusion of conventions with other transportation enterprises regarding mutual traffic and the regulation of competitive traffic.
17. The conclusion of agreements with other railway enterprises regarding the common use and construction of terminals, stations, tracks and other transportation facilities.
18. The conclusion of agreements for the acquisition of real property for constructions to be erected by the General Board, also of all agreements for the acquisition of real property for other than construction purposes.
19. The administration of pension, relief and sick benefit funds of the personnel with the collaboration of the latter.
20. The sanction of building and delivery contracts for constructions to be executed by the General Board, also of all contracts for the delivery of superstructure material, and of the fuel and lubricants for the machinery and for new rolling stock subject to the limitations of Art. 17, par. 11.
21. The supervision of the business management of the District Boards and the transmittal of instructions

to them with the view to attaining desirable unity and agreement in the administration.

22. The sanction of matters mentioned in Art. 38.

Art. 26. The Central Board shall submit to the Administrative Council every quarter; a summary report of the results of the railway management.

Art. 27. A majority of the members present shall constitute a quorum of the Central Board.

In case of a tie-vote the proposition for which the presiding officer has voted; shall be deemed carried : in case of nominations when after two ballotings no majority is shown, the election is determined by lot.

Art. 28. The business shall be distributed by departments among the members of the Board.

The organization of the departments and the assigning of the various divisions, shall be determined by the regulations of the Federal Council in execution of the present law. These regulations shall also state which part of the business may be transacted independently by each of the departments.

(c) District Railway Councils.

Art. 29. The District Railway Councils shall be composed of fifteen to twenty members each, of whom four are appointed by the Federal Council and eleven to sixteen by the cantons and half-cantons.

The distribution of the members by cantons shall be fixed by the executive regulations.

The term of service is three years and coincides with that of the Federal authorities.

Art. 30. The business functions of the District Railway Councils comprise the following matters :

1. The election from their midst, of a president and vice-president for their term of service.

2. The election of a member of the Administrative Council.

3. The formulation of opinions regarding all questions pertaining to railway management, particularly to questions regarding the train schedules and tariffs, to be submitted to the office in authority whenever such opinions are requested :

(a) By the Federal authorities.

(b) A cantonal government.

(c) The Administrative Council.

(d) The organized representatives of agriculture,

commerce, industry and trades, as well as of other economic organizations.

(e) By members of the body itself.

4. The approval of the annual budgets and accounts, together with the respective reports, prepared by the District Boards and to be submitted to the Central Board.

5. The passing of all appropriations not provided for in the budget, or exceeding the amount allowed by the Administrative Council, provided the total amount does not exceed the respective annual budget by more than 100,000 francs.

6. The approval of the quarterly written reports of the District Boards regarding the progress of the enterprise.

Art. 31. The members of the District Railway Councils meet, at the call of their president, regularly once every quarter of the year. They are also convened whenever business exigencies require it or in case at least one-quarter of the membership request it. The particulars regarding the time of their meetings shall be stated in the regulations in execution of the present law.

A majority of the membership present shall constitute a quorum of the District Railway Council.

The members of the District Boards shall assist at the meeting in an advisory capacity.

Art. 32. The members of the District Railway Councils shall be entitled to a per diem compensation and travelling expenses, the amounts to be fixed by the Federal Assembly.

(d) The District Boards of Directors

Art. 33. The District Boards of Directors shall be composed of three members each, appointed by the Federal Council upon the nomination of the Administrative Council, which nomination, however, shall not be binding upon the Federal Council.

Their term of office is six years and coincides with two terms of the Federal Chambers.

The members of the District Boards shall be domiciled at the city where the District Board is located.

Art. 34. The Federal Council appoints for a term of three years a president and a vice-president from among the members of each District Board.

Art. 35. The administrative functions of the District Boards comprise the following matters :

1. The administrative and judicial representation of the railway administration in those matters which are within the jurisdiction of the District Boards.
2. The elaboration of the budgets for their Districts.
3. The maintenance of the road together with its appurtenances, including the superstructures and the telegraph lines.
4. The execution of supplementary constructions and other structural changes on the roads in operation, provided a decision to the contrary is not made by the General Board in the particular case, and the conclusion of contracts relating thereto regarding the acquisition of real property, constructions, and supplies, subject to the restrictions mentioned in Art. 38, par. 4.
5. The elaboration of plans for constructions mentioned in par. 4, in so far as the Central Board does not reserve to itself the elaboration of these plans.
6. The guarding of the railways and the railway police.
7. The taking of measures necessary for the protection of the railway administration against encroachments upon its rights of property and against disturbances in its possession.
8. The preparation of train schedules for its railway system within the limits of the general rules adopted therefore by the Administrative Council and of the traffic instructions of the Central Board.
9. The regulation of the traction service (Fahrdienst).
10. The regulation of the train service.
11. The regulation of the service for the receipt and delivery of freight, including the administration of store-houses.
12. The administration of the shops.
13. The administration of the main storehouses for the keeping of supplies and materials. (Subject to the limitations of Art. 25, par. 21.)
14. The institution of a truck service (Camionnage) and the conclusion of contracts relating thereto with private entrepreneurs.
15. The conclusion of contracts relating to constructions and deliveries for their system unless reserved to the Central Board. (Art. 25, par. 21.)
16. The settlement of claims resulting from the traffic

over the Federal railways proper, by reason of the erroneous application of tariffs or of false routing, of claims for the loss of and damage to merchandise transported, also of complaints about delays of passenger and freight trains in so far as such claims and complaints cannot be turned over to the chiefs of the railway stations or to other authorities; also the receiving and forwarding to the Central Board of similar claims and complaints resulting from the traffic with other railways. (Art. 25, par. 13.)

17. The handling of damage claims for the killing of and injuring of persons.
18. The renting and leasing of real property in their charge, also of the railway restaurants.
19. The sale of dispensable real property.
20. The attending to matters of taxation.
21. The presentation of opinions on questions submitted to them by the Central Board, especially with regard to tariffs, the common use of railway stations and traffic relations with connecting lines.
22. The receiving of desires and requests of the authorities and private individuals in matters subject to the jurisdiction of the General Board and the forwarding to the latter of such desires and demands together with their opinions.

Art. 36. The District Boards shall meet at least three times a year in common with the General Board. At these common meetings presided over by the president of the Central Board, an exchange of views shall be had with regard to the various experiences in the management of the roads, and ways and means shall be devised for the carrying out of desirable improvements.

They are authorized to present to the Central Board like suggestions in writing.

Before promulgating the basic provisions of a general and permanent character in regulation of the scope of authority of the District Boards, the General Board shall give them an opportunity to render their opinions on these regulations.

The District Boards shall take part in an advisory capacity in the meetings of their respective District Railway Councils, and through their presidents in the meetings of the Administrative Council (Arts. 20 and 31).

Art. 37. The District Boards shall appoint all the personnel

that is subordinate to them (Art. 25, par. 2), and fix their salaries and wages subject to the limitations of the law pertaining to salaries, of the salary lists enacted by the Central Board and of the budget:

Art. 38. The sanction of the Central Board is required in the following matters:

1. Settlements of claims for damages mentioned in Art. 35, par. 17, in case such settlements exceed a capital amount of 20,000 francs.
2. Contracts regarding the institution of trucking services (Art. 35, par. 14).
3. Contracts regarding the sale of real property (Art. 35, par. 19), subject to limitations of Art. 17, par. 12.
4. Contracts regarding the execution of construction work and the acquisition of real property, also contracts for the delivery of supplies in cases where the amount contracted for exceeds 100,000 francs.

Art. 39. The provision of Arts. 27 and 28 apply by analogy to the district boards.

4. GENERAL PROVISIONS

Art. 40. As a rule only Swiss citizens having a permanent domicile in Switzerland shall be eligible for service on the Federal railways.

These provisions shall not apply to employees of those parts of the lines operated by the Confederation which are located in foreign territory.

Art. 41. The terms of office of the officials and permanent employees shall be three years, and shall coincide with those of the other Federal officials. This provision does not, however, apply to the terms of office of the members of the Central and District Boards (Arts. 23 and 33).

Art. 42. The salaries of the directors, officials and permanent employees of the Federal railways shall be fixed by a special Federal Law.

Art. 43. The members of the Central and District Boards, also all other officials and employees, may be removed by order of those authorities from which they derive their appointment. The order shall state the reasons of the removal.

Art. 44. The Confederation shall take proper measures in order that the officials and permanent employees of the

Federal railways may receive the instruction necessary for the proper discharge of their duties.

Art. 45. The regulations in execution of the present law shall contain particulars relative to :

1. The system of accounting.
2. The disciplinary powers.
3. The granting of free transportation on passenger trains (passes).

Art. 46. A pension and relief fund shall be organized for the benefit of officials, except the members of the Central and District Boards, and of the permanent employees. These funds shall be maintained by contributions of the members and the treasury of the Federal railways. The contributions of the latter shall not be less than one-half of the total contributions. The remainder is to be contributed by the officials and employees.

The regulations for that fund shall be elaborated by the Administrative Council and be subject to the sanction of the Federal Council.

Existing pension and aid funds whose administration shall be taken over by the Central Administration of the Federal railways together with the acquisition of the railways, may at the discretion of the Federal Council continue their existence for the benefit of their members on their former basis and with the fullest regard for the interests of their members.

The members of these funds shall, however, not be admitted to membership in the general pension and relief fund.

In case of dissolution of the existing pension and relief funds, the rights and claims of their members shall be fully protected.

Art. 47. The Federal Council shall pass all the necessary regulations for the organization of sick benefit funds.

III. TRANSITORY AND CONCLUDING PROVISIONS

Art. 48. The creation of railway districts shall proceed in the measure as the Federal railway system develops. In case Federal operation shall start with a railway system of small extent, the creation of railway districts may be deferred temporarily, while this condition prevails, and the entire management may be entrusted to the Central Board.

The power of deciding these measures of primary organization shall be vested in the Federal Council.

Art. 49. The Confederation as the successor to the rights of the Jura-Simplon railway obligates itself toward the subsidizing cantons to execute the franchise granted by Federal Act of September 24, 1873, for the construction of a Simplon railway and of the Italian franchise for the construction and operation of a railway through the Simplon from the Swiss-Italian frontier to Iselle, dated February 22, 1896, provided the subventions stipulated in Art. 12 of the agreement between Switzerland and Italy of November 25, 1895, shall be forthcoming.

The Confederation will equally promote the efforts for the realization of a railway across the Alps in the eastern part of Switzerland in accordance with Art. 3 of the railway law of December 23, 1872.

It is expressly stipulated that the obligations assumed by the Confederation in the agreement of June 26, 1896, concerning the uniting of the franchises of the United Swiss railways, of acquiring the Toggenburg and constructing the Ricken railway, shall remain in force. The Confederation shall recognize the continuance of these obligations even in case a voluntary purchase of the United Swiss Railway is effected prior to the next term of the purchase.

Art. 50. The Federal Council is ordered in conformity with the provisions of the Federal Law of June 17, 1874, regarding the popular vote on the Federal laws and resolutions, to cause the promulgation of this law and to fix the time when it shall become effective.

Dated Berne, October 15, 1897. (Follow signatures of the president and secretary of the two Federal Chambers.)

The Federal Council resolves: the above Federal Law promulgated October 15, 1897, and sanctioned by the people through their vote of the 20th instant, shall be inserted in the collection of laws of the Confederation and shall become effective forthwith.

Dated Berne, February 2, 1898. (Follow signatures of the President of the Confederation and of the first Vice-Chancellor.)

APPENDIX V

LAW OF JULY 7, 1907

No. 429

REGARDING THE OPERATION BY THE STATE OF THE RAILWAYS NOT CONCEDED TO PRIVATE ENTERPRISE

The Senate and the Chamber of Deputies have approved :
We have sanctioned and promulgate the following :

CHAPTER I. GENERAL PROVISIONS

Art. 1. The State shall operate directly through an independent administration the railways which it has constructed or repurchased, those granted to private industry and the operation of which has been taken over by the State by subsequent laws, and those, the franchises of which shall have expired, as well as the navigation across the Straits of Messina.

The administration of the State railways is authorized :

(a) To continue the operation of the lines Roma-Viterbo, Varese-Porto Ceresio, conceded to the 'Società per le strade ferrate del Mediterraneo' and of the line Cerignola stazione-Cerignola città conceded to the commune of Cerignola.

(b) To continue the operation of the lines conceded to the 'Società delle ferrovie secondarie romane'.

(c) To take over the operation of the lines Alessandria-Ovada, Desenzano-Lago di Garda, and Livorno-Vada, within the scope of the respective conventions approved by Royal decrees dated April 23, 1903; No. 186, April 23, 1903, No. 211, and September 8, 1904, No. 566.

(d) To turn over the operation of the line Brescia-Iseo to the company holding the franchise of the line Iseo-Edolo. The respective agreements and contracts unless covered by preceding conventions approved by law, after they have passed the State Council, shall be approved by Royal decree

which latter shall be presented to Parliament to be given the force of law.

Art. 2. The assumption of the operation of other lines by the State, resulting from the expiration of concessions or of agreements of operation by subsequent law or contract, may be authorized by Royal decree.

The Royal decree shall be submitted by the Minister of Public Works upon agreement with the Minister of the Treasury, and after approval by the Cabinet Council shall be presented to Parliament to be given the force of law.

In other cases the assumption of operation by the State or the extension of operation by private companies, if dependent upon concession or convention, shall require the authorization of special law. In cases where the State has to give notice of its intention to acquire a line, the Government shall in due time lay before Parliament the proposed terms for the acquisition.

To guard the public interests the validity of the denunciation shall be subject, in all cases, to the approval of Parliament.

In case the Government does not consider the acquisition expedient, it shall in due time lay the matter before Parliament.

Art. 3. The independent administration of the State railways, under the high direction and responsibility of the Minister of Public Works, shall have the direct management of all matters relating to the operation of the railway system and of the navigation service, mentioned in the preceding articles, and in the exercise of these functions, it may assume financial obligations on behalf of the service.

The Minister of Public Works and in those parts which concern him, the Minister of the Treasury, shall ascertain by means of inspections the regularity of the service and of the management.

The regulations for such inspections shall be fixed by *executive orders* proposed by the Ministers of Public Works and of the Treasury, passed upon by the State Council, approved by the Cabinet Council, and sanctioned by Royal decree.

CHAPTER II. EXECUTIVE ORGANS OF THE ADMINISTRATION

Art. 4. The administration of the State railways shall be headed by an Administrative Council and a Director-General.

The members of the Council and the Director-General are appointed by Royal decree on the recommendation of the

Minister of Public Works, and the approval of the Cabinet Council.

The Director-General shall not hold any elective or parliamentary office.

The salaries and emoluments to be paid to the Director-General, and to the members of the Council, and eventually to the Vice-Directors-General and Assistant-Directors, shall be fixed by Royal decree upon proposal of the Minister of Public Works in agreement with the Minister of the Treasury and sanction of the Cabinet Council.

The Director-General and the members of the Administrative Council shall not be removed or suspended from office except by Royal decree, stating the reasons of the removal or suspension, upon recommendation of the Minister of Public Works and the approval of the Cabinet Council.

Art. 5. The Administrative Council shall be composed of the Director-General, who shall be the chairman, and eight members, two of whom are to be chosen from amongst the higher railway officials, three from amongst the other high State officials, and three from amongst private citizens not in the State service who shall have given proof of high technical and administrative capacities.

These latter shall be given the rights and privileges of State officials from the date of their appointment, and shall hold the rank of Inspector of the Corps of Civil Engineers.

Railway officials while members of the Council shall continue to hold their offices. The other members of the Council shall cease temporarily to belong to the administrations under which they served prior to their new appointment, but the time spent in their new capacity shall be counted, so far as the law regarding promotions and pensions is concerned.

The regulations regarding the exercise of functions of the Administrative Council shall be fixed by the by-laws to be issued for the carrying out of the present law.

The membership of the Administrative Council is renewed by lot separately for each class ; half the members of the State railway officials every two years ; one-third of the other two classes every three years. The former may be reappointed indefinitely, the latter only for a second term.

The meetings of the Administrative Council shall be valid only in case not less than five members are present, and its decisions shall be passed only by an absolute majority of votes of those present. All the members of the Administrative

Council shall be subject to the law regarding the incompatibility of tenure applying to State officials in general : particularly they shall not hold simultaneously the offices of directors or consulting experts of other transportation concerns or corporations or firms having contracts with the State railways for transportation, supplies or works.

Art. 6. The Administrative Council shall have the power of :

1. Approving the rules and regulations for the various branches of the service and changes thereof.

2. Discussing the preliminary budget estimates, the revised estimates, and the final accounts:

3. Approving the distribution of funds appropriated in the estimates, or those granted by special Acts according to the requirements of the various branches of the service.

4. Approving the plans for works on the lines, accessories (dipendence) and supplies involving an outlay in excess of 50,000 lire.

5. Approving the specifications for public and private bids in excess of 20,000 lire, and those of private contracts in excess of 5,000 lire according to Art. 31.

6. Authorizing suits and approving settlements out of court after hearing the Attorneys-General of the Treasury in cases where the matter is within their jurisdiction, whenever the subject matter under dispute is in excess of 10,000 lire.

The Director-General shall inform the Council at every meeting of all suits brought against the administration within the value limits above mentioned, and shall give brief information of those of less importance.

7. Approving conventions for concession of sidings, for the exchange and renting of rolling stock, the use of stations in common with other railway systems for the through and transfer service with other lines of transportation by land, sea, river, and lake, and also agreements for rebates or special rates.

8. Approving conventions, granting temporary easements, and the sale and exchange of land strips and other real estate forming part of the State railway property. The permission of the Administration of the State domains is required whenever the value of the property to be ceded exceeds 5,000 lire. Accounts of these sales and exchanges shall be rendered in the Reports mentioned in Art. 9.

9. Deliberating on all the propositions relating to the

classification of employees, and the regulations affecting the personnel with the exceptions mentioned in Art. 54.

10. Deciding on appointments, promotions, increases of salaries, details, leaves and retirements, the postponements of promotions in salary or wages, demotions and dismissals from the regular service, with the exceptions laid down in Art. 54.

11. Passing upon complaints of the personnel within the limits and according to the rules laid down in the law and by-laws.

12. Approving gratuities and subsidies to the personnel in case the amounts involved are beyond the authority of the Director-General, as laid down in the by-laws.

13. Approving the regulations relating to payment in advance of salaries and wages of the personnel.

14. Passing upon proposals of the Director-General regarding regulations for the issue of tickets at reduced rates on the occasion of exhibitions, congresses, pilgrimages, and the like.

15. Deciding on all matters that the chairman deems fit to submit to the Council, and on any other proposition originating with the Director-General or any of the members.

16. Deciding or giving its opinion at the request of the Minister of Public Works, on any matters of interest to the proper administration and operation of the railways.

A copy of the decisions taken at every meeting of the Council shall be transmitted to the Minister of Public Works not later than the day after the meeting. The decisions shall go into force immediately except in cases mentioned in Art. 13.

The Administrative Council shall communicate with the Minister through the Director-General.

Art. 7. The office of the General Direction shall be situated in Rome. Certain branches of the service and subordinate offices thereof, however, may be located in other cities of the kingdom.

The subdividing and grouping of the various branches of the General Direction are fixed by Royal decree with the advice of the Administrative Council.

The members of the Central Inspectorate, which is instituted at the General Direction, have the powers of supervision and consultation within the limits of the law and by-laws. Other duties than those mentioned may be imposed upon them by the Director-General.

For purposes of technical consultation regarding projects of importance, the members of the central inspectorate may be

constituted in Committees. The terms and the competence of these Committees and the minimum amounts or costs involved in the projects or matters to be submitted to their opinion shall be fixed by special order.

Art. 8. The Director-General, after due deliberation by the Administrative Council, submits to the Minister of Public Works :

(a) The yearly estimates, the successive modifications and the final accounts.

(b) Proposals for the drawing of amounts from the reserve fund for unexpected expenditures mentioned in Art. 24.

(c) Decisions and proposals regarding modifications in the conditions of transportation and in the tariffs.

(d) The projects of undertakings of a character which necessitates a promulgation of public utility in the sense of Art. 76.

Art. 9. The Director-General, with the approval of the Administrative Council, shall present to the Minister of Public Works an annual report annexed to the estimates on the workings of the service, in which shall be given an account of important contracts entered into and the decisions with regard to conditions of transportation and the tariffs. This report shall also contain a statement of the income and expenditures, as well as recommendations of such changes in the service, the necessity of which may be suggested by investigation and experience.

Art. 10. The Director-General has the power :

(a) Of ordering expenditures within the limits of the approved budget and in the modes sanctioned by the laws and by-laws.

(b) Of executing the decisions of the Administrative Council.

(c) Of legally representing the administration of the State railways in all cases where third persons are involved except in cases mentioned by Art. 12, No. 1, and Art. 872 of the Code of Commerce.

(d) Of approving along technical and financial lines projects of works involving an outlay not in excess of 50,000 lire and no expropriation.

(e) Of authorizing the execution of works, the purchase of supplies, and the expenditures within the limits sanctioned by the Administrative Council.

(f) Of approving contracts for works and supplies by

public and private bids up to 20,000 lire, and for works and supplies by private contract up to 5,000 lire.

(g) Of approving the execution of works without resorting to contract, or by piece work within the limits of the appropriations.

(h) Of authorizing suits and actions to be brought by the Administration, and of approving settlements out of court whenever the subject matter of controversy does not exceed 10,000 lire in value. In case the settlement relates to actions or suits involving government real property, and the amount of the suit exceeds the 'pretorial' jurisdiction, the opinion of the Attorney of the Treasury must be heard.

(i) Of approving the running of trains at reduced rates and facilitating the operation of special trains on the occasion of festivals, fairs, and the like.

(l) Of approving proposals for the granting of special prizes, gratifications, and subsidies, to the personnel which do not fall within the province of the Administrative Council in accordance with the by-laws for the execution of the present law.

(m) Of authorizing in case of urgency the beginning of works and the purchase of supplies already decided on by the Administrative Council, pending the sanction and registration of the respective contracts and of taking other measures necessary for the continuity and safety of the service ; but in all such cases he shall apply for the sanction of the Administrative Council at its following meeting.

(n) Of issuing other orders in the interest of the service in cases not requiring the authorization either of the Administrative Council or of the Minister of Public Works.

The Director-General shall within the periods stated in the by-laws inform the Minister and the Administrative Council of the most important measures, and give summary notice of other measures taken by him within the power and attributions of his office.

With the approval of the Administrative Council and the sanction of the Minister, the Director-General may delegate temporarily some of the powers to subordinate officials.

The Director-General may, with the approval of the Council, propose to the Minister the names of not more than four officials who shall have charge of certain branches of the service with the rank of Assistant-Directors ; amongst these latter may be designated one or two who shall act in

place of the Director-General in case of his absence or disability.

Art. 11. There shall be created 'compartmental' offices of the service subordinated to the General Direction. The number, location, territorial extent, and internal management of the compartmental offices shall be determined by Royal decree upon advice of the Administrative Council and the Cabinet Council.

This decree, as well as all others changing the number and location of the compartmental offices, shall be presented without delay to Parliament to be given force of law.

All further measures required for the subdividing and co-ordinating of the work of the compartmental offices or that of any branches of the service shall be undertaken by Royal decree.

Art. 12. The Compartmental Directions, within the limits of their own territorial subdivisions and the scope of the powers conferred on them by the laws, by-laws, orders, and instructions received by the Director-General, shall :

1. Within the limits of their territorial divisions and through an official to be determined by the by-laws, represent the Administration in its dealings with third persons, except in cases provided in Art. 872 of the Code of Commerce.

2. In conformity with the instructions of the General Direction have charge of the management of all branches of the service, of the movement and traffic of the traction and rolling stock, of the maintenance and inspection of the way, and in general of the technical and administrative management as well as the accountancy of that part of the railways system which is intrusted to them and does not fall within the direct province of the General Direction.

3. Approve proposed works of renewals and extraordinary maintenance and contracts of supplies for works within the amounts fixed by the general by-laws of the service.

4. Approve the contracts for works and supplies by public and private bids as well as other contracts within the limits fixed by the Administrative Council and the General Direction.

5. Approve the execution without contract or by piecework or works, and the ordering of supplies contained in the approved programmes.

6. Examine and submit the projects of works and proposals of supplies unless reserved to the general direction

whenever these projects or proposals either by their character or financial importance exceed the limits mentioned in Art. 3.

7. Adopt in case of emergency the necessary measures for the continuity and safety of the service, sending however immediate notice of the measures taken to the Director-General.

8. Approve settlements out of court, and decide claims, make representations for the reimbursement of charges and fees unduly collected, in accordance with the rules fixed by the Administrative Council and the General Direction.

9. Examine and report to the General Direction the conditions of commerce and production in relation to the tariffs and transportation conditions, and propose measures for the development of the movement of trains and of the public service.

10. Authorize the running of special trains at normal tariff rates on the occasion of fairs, festivals, pilgrimages, congresses, and the like.

11. See to the execution of any other matters that may be intrusted to them by the General Direction.

Art. 13. Except in cases mentioned in Art. 57 the Minister of Public Works may, at his own initiative or at the instigation of third persons by executive order stating his reasons, declare the illegality of any Act or measure passed by the Administration that may be contrary to the laws and by-laws.

For serious reasons the Minister of Public Works may moreover suspend temporarily, and afterward by decree stating his reasons therein, and after deliberation of the Cabinet Council cancel the decisions of the Administrative Council and measures passed by the General Direction.

The Minister prior to decreeing the temporary suspension, unless prevented by absolute urgency of the matter, but at all events prior to the deliberation of the Cabinet Council, shall hear the explanations of the Administration. The order of the Minister shall be communicated without delay to the Administration.

Art. 14. Apart from the responsibilities prescribed by existing laws the members of the Administrative Council and the Director-General are accountable to the Government for all losses and damages suffered by the State or third persons, to whom the State is responsible, for violations of the laws or decrees or grave negligence or abuse of power of which they may have been guilty in the exercise of their respective powers,

No responsibility shall attach to those members of the Administrative Council who for legitimate reasons may not have taken part in deliberation, or who at the proper time may have entered in the minutes their dissenting opinion with reasons thereof, or reclamations or positive proposals to avoid the damage.

All the above-named officials are subject to the jurisdiction of the Court of Accounts, in accordance with the Arts. 67 and 69 of the existing law on the general accountancy of the State, for the purpose of ascertaining and liquidating the responsibility they may have incurred.

CHAPTER III. BUDGET AND CONTROL

Art. 15. The estimates of revenues and expenditures are presented to Parliament for its approval as an appendix to the estimate of expenditures of the Ministry of Public Works.

All changes which may have become necessary in the preliminary estimates are sanctioned by the Act approving the revised estimates. The final accounts, together with the opinion of the Court of Accounts relating thereto, shall be appended to the general accounts of the Government and moreover shall include every three years a synthetic statement of the gross revenue of each line.

Art. 16. The administration of the State railways shall defray the expenditures from the current revenue.

Art. 17. The administration of the State railways shall have at its disposal a fund of storehouse supplies for restocking materials and articles of consumption, the amount of this fund to be determined each year together with the Budget Act.

This fund shall be administered independently and its accounts shall be annexed to the final accounts mentioned in Art. 15 in agreement with the provisions of the Act of July 11, 1897, No. 256.

Art. 18. The revenues are divided into ordinary and extraordinary revenues. Under the head of ordinary revenues are included earnings from operation, the income from the use of real property and from the temporary transfer and sale of materials used in the construction of the track, rolling stock, and of other works provided for in the budget, the reimbursements and contributions made by corporations holding railway franchises, those made by other branches of the public administration and by third persons towards expenditures for repairs,

renewal works, and other services, the income from leasing rolling stock and any other earnings not specified.

Under the head of extraordinary revenues are included amounts furnished by the Treasury for the extraordinary expenses provided for in Art. 22, the reimbursements and contributions of corporations holding railway franchises, of other branches of the public service and of third persons towards works and supplies for the increase of the railway property, the proceeds from the sale of real property and old discarded materials (*materiali di disfaccimento*) constituting part of the railway property and of the navigation service.

Art. 19. Expenditures are divided into ordinary expenses of operation, supplementary, accessory, and extraordinary expenses.

In the ordinary part of the estimates are inscribed the ordinary, supplementary, and accessory expenses.

The extraordinary part of the budget contains the extraordinary expenses.

Art. 20. Ordinary operating expenses include those for the personnel, fuel account, ordinary maintenance of the road and its dependencies, cost of maintenance of the materials, and in general all expenses relating to the operation proper of the railways.

Supplementary expenses of operation are those of extraordinary maintenance undertaken for the purpose of repairing or preventing damages to the lines and their dependencies from acts of God (*force majeure*), for the renewal of the superstructure, the rolling material, as well as the amounts which in accordance with the Budget Act are set aside annually for the betterment of the property.

Accessory expenses comprise :

(a) The amounts of interest payable on the cost of rolling stock and other service material transferred to the State Administration on the date of July 1, 1905, and such as was bought after that date in so far as the transactions gave rise to the creation of liabilities after the passage of the Act of April 22, 1905, No. 137.

(b) Amounts of interest payable on the cost of the material turned over to the Administration on the date of July 1, 1905, and on the sums furnished by the Treasury for replenishing the fund for storehouse supplies mentioned in Art. 17 of this law, in so far as the transactions gave rise to the creation of liabilities after the passage of the Act of April 22, 1905, No. 137.

(c) Interest and amortization of sums spent for the increase of the value of the property mentioned in Art. 21, *b* and *c*.

(d) The sums assigned to the reserve fund in accordance with Art. 24.

(e) The part of the revenue, the annual long term rentals and like payments due to franchise holders of railways operated by the State.

(f) The amortization quota on the amounts paid by the Treasury for liquidating the accounts between the years 1885-1905, and the amounts advanced for the purposes mentioned in paragraphs *a* and *b* of this article that might be charged to the account of the railways.

Art. 21. Extraordinary expenses include :

(a) Those for works, supplies, transportation, valuations, consignments, and other expenditures incurred for the establishment of the new Administration.

(b) Those for continuing and completing the works and supplies in progress on July 1, 1905, on the lines taken over by the State on that day and those for continuing and completing works and supplies on the lines of the old southern system ('*meridionali*'), and those between Vicenza-Schio, Vicenza-Treviso and Padova-Bassano, taken over by the State on July 1, 1906, in so far as these expenses are chargeable to the State in accordance with the respective contracts.

(c) Those made necessary by reason of the deficient state of maintenance of the lines and of the rolling stock on June 30, 1905, in order to put the railways into proper condition.

(d) Those for the supply of new rolling stock and operating material, also for materials required for the navigation service either to make up for the deficient supply, or for the substitution of leased stock and to meet the increased demands resulting from an increase of traffic and those for the betterment of material in order to increase its value, also in case of renewals mentioned in paragraph 2 of Art. 20.

(e) Those for the supply of superstructures and the metallic parts required for the construction of new tracks incurred with the view of increasing the value of the property as well as the expenses for betterments on the lines and on the track, also expenses of renewals mentioned in paragraph 2 of Art. 20; for new plants and enlargement of those existing, for new plants of electric traction and the like, the amounts for which are not provided for in the ordinary part of the estimates for betterments in accordance with said paragraph of Art. 20.

Art. 22. For each fiscal year the Minister of the Treasury at the proposal of the Minister of Public Works shall supply to the State railway administration the amounts required for the expenditure mentioned in Art. 21, which amounts shall figure in the budget as extraordinary receipts.

Art. 23. In the preliminary as well as in the final estimates there shall be placed in one column the items proposed by the Director-General and sanctioned by the Administrative Council, and in a second column the respective changes that the Minister of Public Works may find advisable to effect therein with appropriate remarks in justification of the corresponding chapters.

New items or increases of those submitted to Parliament shall not be sanctioned except by special Act.

Art. 24. There shall be created a 'reserve fund for unexpected expenditure' to be formed of annual assignments of 2 per cent of the gross receipts.

The amounts due on account of this fund shall be deposited with the Treasury on current non-interest-bearing account.

The transfers to this fund shall cease whenever the fund shall have reached the amount of 30,000,000 lire; in case the total amount falls below the above-stated figure it shall be replenished in whole or in part.

Unexpected outlays for the needs of the service which are not sufficiently provided for in the respective part of the budget, and for which timely credits cannot be procured by changes in the respective parts of the estimated budget shall be defrayed out of the above fund.

Whenever found expedient the amounts of this fund may with due regard to its availability be used under exceptional circumstances to anticipate the purchase of supplies in excess of ordinary quantities.

The appropriation of money out of the reserve fund for unexpected outlays and the placing of these amounts in the respective chapter of the budget or in a new chapter thereof, is made by Royal decree at the proposal of the Ministers of Public Works and the Treasury.

The above-named decrees are submitted to Parliament together with the final accounts.

In case of such outlays the budgets for the following fiscal year shall contain appropriate items for the replenishing of the fund.

Art. 25. The auditing (*ragioneria*) division of the Adminis-

tration of the State railways shall be charged with the control of the regularity of the documents relating to all expenditures and the respective accounting, the control of the revenues of the cash division, the supervision of the management of the supply stores and storehouses, the inventories as well as the book-keeping of income and expenses.

The employees of the audit department connected with the General Direction and the Compartmental Directions and administrative officials in charge of the expenses are subject to the jurisdiction of the Court of Accounts.

Art. 26. The Court of Accounts shall supervise the collection of revenues and audits, the expenditures of the State railway Administration, and has the right to demand and to receive all documents pertaining to the respective expenditures.

The functions of the Court of Accounts are discharged through a special office connected with the State railway Administration.

The regulation for the working of said office shall be laid down in the by-laws approved by Royal decree at the proposal of the Minister of Public Works and the Treasury with the consent of the State Council and the Court of Accounts.

Art. 27. The law of the general State accountancy shall be applicable to the administration of the railways unless modified by the present Act.

In case of contracts for works, supplies, and stores, a preliminary registration at the Court of Accounts is required only in cases where the amount involved is in excess of 50,000 lire. The requirement of preliminary registration is waived in cases of contracts, supplies, and other contractual obligations for works or other purposes which in the indisputable opinion of the Administrative Council have to be made with urgency in order to insure the continuity and regularity of the service. The decision of urgency must state the reasons thereof. Each month the lists of the obligations assumed without preliminary registration including those of an urgent character are communicated to the Court of Accounts.

Art. 28. The by-laws mentioned in Art. 26 shall contain regulations determining the person or persons who shall have the power to sign the lists of fixed expenses, also the orders and vouchers of payment. These by-laws shall also fix the rights and duties of the audit as well as the rules for the examination of the condition of the treasury.

Payment on account of expense lists also on orders and

vouchers shall be effected, whenever occasion requires it, by the station treasuries in accordance with the modes and guarantees which may be prescribed by the above-named by-laws. The latter shall also contain the regulations for facilitating and expediting (waiving when necessary the provisions of the preceding article) the procedure of rectification made necessary by reason of underrated freight charges, for the collection of charges on goods shipped, for the return of excess passenger and freight charges, also the regulations regarding the monthly debit accounts of the agents, and of the monthly stock accounts of the supply stores.

Art. 29. The Director-General with the approval of the Administrative Council may open credits by means of service drafts (*mandati a disposizione*) and drafts for advances (*mandati di anticipazione*) to subordinate officials for the payment of expenses for works done or materials prepared under Government management.

Such orders must not exceed the sum of 50,000 lire, and the monthly accounts thereof shall be presented to the General Direction for revision by the central audit and for the control of the Court of Accounts. Pay checks issued upon the above service drafts (*mandati a disposizione*) and upon drafts for advances (*mandati di anticipazione*) shall be detached from a stub book.

Art. 30. In cases permitted by law, any act which is intended to prevent or suspend the payment of moneys on account of the budget of the railways operated by the State shall be brought to the notice of the Director-General, who shall send a corresponding notice to the official charged with the payment.

Creditors may, however, send such notice to the official, cashier, or agent in charge of disbursements, which persons shall thereupon send immediate notice to the Director-General.

Art. 31. The provisions of Arts. 322, 337, and 362, of the law of March 20, 1865, No. 2248, appendix 'F'; and the modifications thereof contained in the Act of June 15, 1893, No. 294, are not applicable to contracts which may be entered into with the State railway Administration and to specifications prepared by it.

The provisions of the law of the general accountancy of the State, except Arts. 9, 10, 12, 14, 15, and 16 of the same law, are applicable to those contracts which are the source of

revenue or expenditure on account of the State railway system.

Private bids shall be permitted regardless of the amount involved whenever the interests of the administration might suffer from the application of public bids.

The awarding of contracts without bids, but accompanied by the statement of the reasons of such action, is permitted :

(a) In cases when the contract does not exceed an amount of 50,000 lire, or in cases where the expenditure is yearly and the Administration becomes obligated for a term not exceeding five years, 10,000 lire.

(b) For contracts the value of which cannot be determined beforehand, and the expenditure under which is based upon unit cost per weight or measure.

(c) For the purchase of coal.

(d) For other supplies of unlimited amount whenever the interest of the Administration precludes the application of public or private bids.

In the latter two cases, however, the awarding of contracts without bids must be authorized by the Minister of Public Works.

Such an authorization is not required in the case of supplies, works, and materials therefore of unlimited amount, whenever in the expressed opinion of the Administrative Council, containing the reasons for such opinion, it is deemed that the urgency or the requirements of the safety and regularity of the service do not permit of the delay occasioned by bids.

The acquisition of supplies may be made directly at the place of production and in the principal foreign markets through officials designated by the Administration for the respective purposes.

The services, works, and materials to be executed and prepared under direct Government management, shall be carried out and furnished in accordance with the special by-laws, approved by the Minister of Public Works in accord with the Minister of the Treasury and with the advice of the Administrative and State Councils.

Art. 32. The co-operative associations of production and labour which have complied with the provisions of the law of May 12, 1904, No. 178, in cases of works and contracts affecting the State railway administration, are subject to the provisions of the same law.

Associations of workmen (ConSORZI), both existing ones or which may be formed by co-operative societies (Società Co-operative di produzione e lavoro), may be awarded, even without competitive bids, the execution of the above-named contracts, provided the maximum amount of the contract does not exceed double the total amount that might be awarded according to existing regulations, to each single society constituting the association.

Provision may also be made by which the deposit for the faithful execution of the contract may be formed by a deduction of 10 per cent from the amount of every part payment, the sum so deducted to be returned after completion and acceptance of the work.

The concessions contained in this article shall be granted whenever, in the indisputable judgement of the awarding Administration, the societies or associations present sufficient guarantees of capacity, stability, and solvency for the regular execution of the contract to be awarded.

Art. 33. Contracts for the supply of fixed and rolling material and the superstructure shall ordinarily be awarded to national industry, under a system of public bids.

The General Direction of State railways, with the advice of the Administrative Council, may, however, proceed by private bids or contracts without bids whenever it is found advisable in the interest of the Administration or in order to insure an equitable distribution of the contracts amongst the establishments of the same class in the various parts of the kingdom, with the exception noted in Art. 16 of the law of July 8, 1904, No. 351.

In case the results of public and private bids, or contracts without bids, are such as to indicate that the conditions of the domestic industry do not admit of equitable prices, the General Direction of State railways with the advice of the Administrative Council and by authority of the Cabinet Council may invite international bids, in which, however, domestic firms shall also be permitted to take part.

Whenever there is an urgent need of the acquisition of fixed material and rolling stock and material for superstructure, private bids and contracts without bids with private foreign firms are permitted as a matter of exception with the consent of the Cabinet Council.

The acquisition of materials and machinery protected by patents or produced by special firms, shall be effected by the

General Direction of the State railways, with the assent of the Administrative Council.

In the annual report prescribed by Art. 9 the Director-General shall render an analytical account of the above-named supplies.

Art. 34. Other conditions being equal, in the case of international bids, preference shall be given to national industry.

By the advice of the Administrative Council, proper preference to domestic industry shall be accorded in cases of contracts for the supply of material mentioned in the preceding article, which preference however shall not exceed 5 per cent over and above the bid of foreign industry in addition to the import duty and cost of transportation to the place of delivery.

The amount bid by foreign industry is arrived at by taking the average of the lowest bids submitted by half the number of the foreign bids that have been recognized as valid. In case the total number of bids happens to be an odd number, the half is formed by adding one to the total.

In case there shall be only one foreign bid the question of determining the equality of conditions shall be left to the judgement of the Administrative Council.

Whenever occasion demands the supply without delay of the normal quantity of material for the operation of the State railways, there may be permitted under exceptional circumstances with the assent of the Cabinet Council the awarding of contracts to foreign firms by private bids, or of contracts without bids.

Art. 35. All contracts and Acts made by the State railway Administration and relating to the operation of the railways are subject to a fixed fee of 1 lira and exempt from all proportional registration fees.

Art. 36. The Compartmental Cashier's offices (*casse compartementali*) collect the available revenue of the stations and all other ordinary and extraordinary income, and provide for the payment of expenditures upon direct or service drafts or drafts for advances (*mandati o diretti o a disposizione o di anticipazione*), and the payment on account of the pay rolls issued by the Administration and certified by the central or compartmental audit offices.

The amounts exceeding the daily needs of the cashier's office are deposited with the 'Banca d'Italia'.

These amounts shall be kept in a special interest-bearing current account, distinct from that of the State Treasury's, on

the terms proposed by the Minister of the Treasury in accord with the Minister of Public Works and approved by Royal decree.

The Director-General shall have the power to draw upon said special current account for the needs of the railway service by means of drafts certified by the representative of the public treasury at the treasury section of the bank, in accordance with the by-laws.

The regulations for the railway treasury service and those relating to the collection, custody, and deposit of the moneys, shall be fixed by the by-laws.

Art. 37. The cashiers and the agents under them who are intrusted with the keeping of moneys, shall give security to guarantee their financial management, within the limits and according to the forms determined by the by-laws, and are subject to the jurisdiction of the Court of Accounts in conformity with Art. 64 of the law of February 17, 1884, No. 2016.

CHAPTER IV. TARIFFS AND TIME-SCHEDULES

Art. 38. The conditions of transportation and the tariffs now in force on the railways operated by the State shall be continued in force.

Within three years of the publication of the present Act, the provisions in force regarding the conditions of transportation shall be revised, with a view to co-ordinating the same, in so far as freight is concerned, with the Berne Convention and its successive appendices, and the further view of simplifying the tariffs.

A Royal decree shall provide for this revision including the co-ordination and simplification mentioned. This decree shall be proposed by the Minister of Public Works in agreement with the Ministers of the Treasury and of Agriculture, Industry and Commerce, upon advice of the General Traffic Council and the Cabinet Council.

This decree shall be presented to Parliament without delay to be given the force of law.

Until the time of the publication of such decree the provisions of Art. 2 of the Act of July 12, 1906, No. 332, shall remain in force.

Art. 39. Reductions in the tariffs shall be sanctioned by Royal decrees upon the proposal of the Minister of Public

Works in agreement with the Ministers of the Treasury and Agriculture, Industry and Commerce, upon the advice of the General Traffic Council and the sanction of the Cabinet Council.

The Royal decree after one year of experimentation, unless revoked before the expiration of the period mentioned, shall be presented to Parliament in order to receive the force of law.

After the reform of the tariffs mentioned in the preceding article no tariff shall be increased nor any condition of transportation modified to the disadvantage of the shipper unless by act of law.

Reduced freight rates granted by special concessions on temporary shipments applying to given quantities of articles and between certain stations, on the basis of contracts with shippers, may be authorized by the Director-General with the approval of the Administrative Council. Equal treatment shall, however, be accorded to other applicants under the same conditions.

Such reductions shall be sanctioned by the Minister of Public Works in accord with the Minister of the Treasury. Whenever eight days shall have passed since the notice of the approval by the Administrative Council has been sent to the Minister of Public Works, and the latter has not expressed his disapproval of the Council's decision, it shall be presumed that the sanction has been accorded.

The provisions of Arts. 3 and 4 of the law of June 9, 1901, No. 220, relative to the so-called economical service (*esercizio economico*), are applicable to the transportation of passengers by ordinary, accommodation, and mixed trains (*treni accelerati, omnibus e misti*), in case an average reduction not below that indicated in Art. 5 of said law shall be made to apply to such trains. The Royal decree mentioned in the first paragraph of this article shall state the reduced rate of the tax on these tickets, imposed in accordance with the first part of Art. 4 of the law just mentioned.

Art. 40. A general revision of the schedule and classification of the articles of transportation shall take place every five years.

The changes resulting from such a revision shall be sanctioned by Royal decree on the proposal of the Minister of Public Works in accord with the Ministers of the Treasury and Agriculture, Industry and Commerce, concurred in by the General Traffic Council and the Cabinet Council. The decree

shall be presented without delay to Parliament to be given force of law.

Art. 41. The State railway administration may direct the freight over any other besides the shortest route, whenever being in possession of the freight it is in a position to transport the same over its own lines or the lines operated by it either to the point of destination or of the connecting line ; applying, however, in every case the rate corresponding to the shortest route, in case the latter is a line of the same gauge and operates a through service with the State railways ; in such cases the time of delivery shall however not be changed, and no compensation for the freight revenue lost shall be accorded to the corporation controlling the shortest line.

The reduced rates resulting from the application of differential tariffs (*tariffe derivanti della base differenziale*) apply also to through traffic passing over private railways, provided the concessionaires agree to such an arrangement and the rates prevailing on the State railways are also in force on these private railways. In the case of new concessions of railways to private industry, the concessionaires shall be obliged to carry (through) traffic at through rates over their lines.

Art. 42. The institution of through service (*servizi cumulativi*) shall be obligatory in case of connecting lines.

Exceptions from this obligation may be granted in case of consignments in direct transit, or in cases of transshipments from intermediate stations.

In case there is no direct connection between the railways and other means of transportation, or if for other reasons it is found inexpedient by the advice of the General Traffic Council to establish a through service, the operating company shall establish a transfer service (*servizio di corrispondenza*).

The obligation of introducing through or transfer service respectively (*servizi cumulativi o di corrispondenza*) shall be made part of every new or renewed concession given to land or water carriers in any manner subventioned by the State or by local public bodies and having contracts for public services.

Art. 43. In cases where by reason of strong inclines it is found necessary to adopt special systems of construction and operation for the transportation of goods and passengers, different from the normal system of adhesion, the respective parts of the line with respect to passenger and freight tariffs shall be computed at distance rates which shall be fixed for each individual case at the proposal of the Director-General with

the approval of the Administrative Council by decree of the Minister of Public Works.

Art. 44. The terms and rates of the through and transfer services mentioned in the preceding articles, also those relating to the use of common stations, are determined by agreement of the State railway administration with other interested administrations.

In case an agreement shall not be reached within three months after a request has been made by the respective party, or within six months after direct application by an interested party has been made to the Director-General of the State railways and to the other administrations, the terms and rates of the service shall be fixed by three arbiters agreed upon by the administrations, or in case of failure of such an agreement, one named by the Administrative Council, another by the interested transportation company, and a third named by the President of the Court of Appeals of Rome.

In case one of the administrations does not choose its own arbiter, the President of the Court of Appeals upon request of the other administrations or any interested party, shall name the other missing arbiter or arbiters.

The arbiters shall decide the case according to the rules applying to 'amicable compromises' (come amichevoli compositori).

Art. 45. No judicial action against the State railway administration shall be brought for non-fulfilment of the terms of contracts of transportation or on account of classification of the freight or of the application of the tariffs, before the expiration of forty days after the claim has been presented in administrative order.

Proceedings of 'ascertainment' (accertamenti), however, may be brought in accordance with Art. 402 and 71 of the Code of Commerce even before the claim is presented in administrative order or pending such claim.

Art. 46. The general time-schedules for passenger trains are fixed upon proposal of the Director-General by the Administrative Council.

Art. 47. The operation of a line shall be made up of three daily passenger trains in either direction as long as the annual gross revenue from the passengers and express freight service shall not exceed 9,000 lire per kilometre.

When this annual revenue exceeds under normal conditions 9,000 lire per kilometre, a daily passenger train in either direction shall be added.

On lines which yield an annual revenue in excess of 12,000 lire per kilometre from the transportation of passengers and express freight, the Administrative Council at the proposal of the Director-General containing the reasons thereof may authorize the operation of additional daily trains.

The Director-General shall have the power to increase for a limited period the number of passenger trains in addition to the normal number.

Trains de luxe shall not be counted in the daily number of ordinary passenger trains of the single lines.

Art. 48. The Director-General may, on account of special local conditions, or in order to facilitate suburban, postal, and like services, authorize the operation on certain lines or parts of lines, of light trains or automobile cars in place of ordinary passenger trains.

The provisions of the preceding article shall apply to the introduction of new light trains or automobile cars.

Art. 49. In case of operation of passenger trains by electric traction or by means of automobile cars only, the provisions of the preceding Art. 47 shall not apply, and the daily number of trains in either direction shall be fixed in proportion to the number of passengers carried ; but in no case the number shall fall below that fixed in the article mentioned.

Art. 50. Whenever under ordinary conditions a decrease of revenue from the transportation of passengers and express freight is found, the daily number of passenger trains may, with the assent of the General Traffic Council, be reduced in conformity with the provision of Art. 47.

The number of passenger trains operated on any line in accordance with the time-schedules in force at the time the present law goes into effect, shall not be decreased by one train in either direction unless the number of passenger trains, according to the time-schedules mentioned, be in excess by two or more trains of the number fixed by provisions of Arts. 47 and 49. In such cases the opinion of the General Traffic Council shall be heard.

Art. 51. Whenever sufficient reasons demand it the Minister of Public Works may, with the sanction of the Cabinet Council, order the installation of international trains de luxe even though the Administrative Council may not have deemed it opportune to decide their installation.

Art. 52. The Administrative Council upon the proposal of the Director-General may decide upon :

- (a) The change of stations to substations and that of substations to stations.
- (b) The opening or closing of substations.

CHAPTER V. EMPLOYEES

Art. 53. The employment, appointment, wages and salaries, promotions, discipline, discharges, the terms of service and the general conditions of the service and the supplementary compensations paid to railway employees, are regulated in accordance with rules contained in a Royal decree issued with the advice of the Cabinet Council.

Within one year from the date fixed by the decree mentioned in Art. 85 of the present law, a Royal decree shall be issued, by advice of the Cabinet Council, which shall fix the organic lists of the employees of the first six grades of the tables of existing ranks, and shall determine also the number of positions in each class.

Every change of said lists shall be approved in the same mode and manner.

The Royal decrees mentioned in paragraphs 2 and 3 shall be presented without delay to Parliament to be given force of law.

For the remaining grades the number of positions in each class shall be fixed by decision of the Administrative Council sanctioned by the Minister of Public Works.

To the accounts for each budget year shall be appended a statement showing the number of all employees distinguished by grades and classes with the corresponding data of expenditure.

Art. 54. The Minister of Public Works shall approve the decisions of the Administrative Council containing the reasons relating to the appointments, promotions, details, discharges, and dismissals of employees of a grade equal or superior to the first of the existing table of ranks. Any action affecting the chief of the audit division shall be taken by the Minister of Public Works in accord with the Minister of the Treasury.

Art. 55. Appointments of new employees shall be made by public competition except for positions of manual labour and of temporary character. The privileges reserved to non-commissioned officers of the Royal Army and Navy shall remain in force.

Art. 56. All employees of railways operated by the State, whatever their grade and office, are regarded as public officials.

All employees who voluntarily leave or do not assume their respective offices or discharge their duties in such a way as to interrupt or disturb the continuity and regularity of the service, shall be regarded as having resigned and their places shall be filled, apart from their criminal responsibility, in accordance with the law in force.

The Director-General may, however, upon the favourable advice of the Administrative Council, consider the individual conditions and responsibilities, and apply instead of the suspension of service, the postponement of the term of promotion, or demotion.

Art. 57. Appeals to the fourth section of the State Council by the respective persons against the Acts and proceedings affecting the personnel, are permitted in accordance with Art. 24 of the law of June 2, 1889, No. 6166 (third series).

In cases of disciplinary punishments, such appeals are permitted in case of postponement of promotion, of demotion, and dismissal.

Appeal may be brought within sixty days after the publication of the decision or proceeding among the general orders of the Administration.

Art. 58. The personal income tax on pensions and annuities granted in favour of railway employees retired previous to July 1, 1905, shall continue to be imposed during the time the payments are made in accordance with the regulations then in force.

The personal income tax on pensions and annuities granted or to be granted beginning with July 1, 1905, in favour of employees and their families on account of existing as well as new railway retirement and superannuation funds, shall be imposed, beginning with the date the present law goes into force, in accordance with Arts. 41 and 54, D, of the law of August 24, 1887, No. 4021, and of Art. 2 of the law of July 22, 1894, No. 339.

In the case of pensions or annuities of employees retired after June 30, 1905, and within three years from the date fixed in the Royal decree mentioned in Art. 59, the State railway administration shall charge itself, keeping a separate account thereof, with the difference in the tax that may result from the taxation under schedule D.

Annuities for life and pensions reckoned on a per diem basis

paid by the second section of the retirement and superannuation fund and the mutual assistance associations (dalla 2^a Sezione dell' Istituto di previdenza e del Consorzio di mutuo soccorso), are exempt from the personal income tax.

Art. 59. Within a period of three years from the date fixed by Royal decree mentioned in Art. 85 of the present law, the Administration shall have the power to retire from the service employees of the first nine grades who may have reached the age of fifty or completed twenty-five years of service, whose efficiency in the indisputable judgement of the Administrative Council, may prove insufficient for the good of the service.

In the case of employees of a grade equal or superior to that of a chief of division (capo-servizio), the sanction of the Minister in conformity with Art. 54 continues to be required.

Prior to the formal decision of a proposed retirement, the Administration shall give notice thereof to the respective employees who shall have the right to submit their observations to the Council in writing within ten days.

Art. 60. A pension (assegno) proportional to the years of service in accordance with the pension laws of the State or proportional to the contributions made, in agreement with the regulations of the railway retirement funds then in force, according to the railway systems by which they were employed, shall be paid to the employees mentioned in the preceding article.

This pension (assegno) shall, however, be not less than two-thirds of the wage or salary last paid to the retired employee, nor in excess of the amount of pension he would have been entitled to at the time of his normal retirement with pension.

A pension within the limits indicated in the preceding paragraph shall be granted to employees who, in accordance with Art. 7, paragraph last but one of Act of July 12, 1906, No. 332, shall have the right to a lump payment in case of normal retirement.

The above pensions (assegni) shall be a charge on the railway budget during the periods intervening up to the time when these persons shall be entitled by reason of their age to the normal pensions granted by the respective railway systems or until the age of sixty-five in the case of employees mentioned in the preceding paragraph, when they shall be placed on the regular retirement list.

The contributions to the retirement funds or the State

treasury by the employees of the various systems shall be continued on the basis of the last paid salaries, and the Administration shall contribute the differences between the amounts due from the salaries and the amounts deducted from the pensions, until such time when the respective persons shall have attained the age limit at which they are entitled to their normal retirement pensions, in accordance with the regulations for the use of the retirement and superannuation fund towards which they had been contributors, or on the basis of the salaries last paid to them in the case of State railway employees.

The estimates for each fiscal year shall contain, in a separate chapter, the amounts set aside for the outlay resulting from the anticipated retirement, in accordance with the preceding article.

CHAPTER VI

GENERAL TRAFFIC COUNCIL AND COMPARTMENTAL TRAFFIC COMMISSIONS

Art. 61. Under the Ministry of Public Works (General Direction of State railways) there shall be organized a General Traffic Council, and in each compartment there shall be organized a Compartmental Traffic Commission.

Art. 62. The General Traffic Council is called upon to give its opinion :

1. On proposals of the General Direction for the increase or lowering of the railway tariffs.

2. On the abolition of the tariffs in force.

3. On the introduction of new experimental tariffs and on the expediency of maintaining or abolishing them at the expiration of the experimental period.

4. On the systematic list of commodities (nomenclature) and the classification thereof.

5. On the interpretation of the terms established for railway traffic and on proposals for changes thereof.

6. On all questions that may be submitted to the Council by the Minister of Public Works or the State railway administration regarding the relations between the public and the railways, both in matters of traffic over the State lines as well as through traffic and transfer traffic to other transportation companies by land or water.

7. On the provisions and terms of special concessions

mentioned in Art. 39 of the present law, and on their extension and renewals.

The Council furthermore taking account of the labours of the Compartmental Commissions, at the request of the Minister and the Director-General or upon its own initiative, shall investigate the needs of agriculture, industry and commerce, in relation to the tariffs, to the railway movement and the general time-schedules and shall formulate proposals to satisfy these needs.

The advice of the General Traffic Council must be heard on matters mentioned in Nos. 1, 2, 3, and 7 of the present article.

Art. 63. The General Traffic Council shall have as its Chairman the Minister of Public Works and the following members :

(a) The Director-General of the State railways who shall serve as Vice-Chairman.

(b) Three high officials of the Ministry of Public Works ; two officials of the Ministries of the Treasury and of Agriculture, Industry and Commerce ; one official of each of the following Ministries, Finance, Posts and Telegraphs, War and Navy, whose duties shall have been akin to those of railway transportation.

(c) Three high officials of the State railways, chosen by the Administrative Council.

(d) One member designated by the Administrative Council of the Royal Sardinian railways ; one member to be designated by the Association of the railways of local interest and one by the Association of Italian tramways.

(e) One delegate for each of the local consultative commissions mentioned in Arts. 67 and 70 chosen by these commissions from amongst their elective members.

(f) Two representatives designated by the Superior Council of Commerce and Industry ; and two designated by the Superior Council of Agriculture from amongst their members.

(g) Seven members chosen by the Minister of Public Works from amongst persons of special technical or legal capacity in railway matters.

(h) Two representatives of the more important navigation companies of the kingdom appointed by the Minister of Public Works, in the order of priority of their existence, from a roster made up in agreement with the Minister of the Navy and revised every four years, in accordance with the rules laid down in the by-laws.

(i) A representative of the Associations of the Italian press elected in the mode to be fixed by the by-laws.

(j) Two delegates of the Chambers of Commerce and two of the Agricultural Committees.

(k) One delegate of the Superior Council of Health.

(l) Two representatives of the railway employees elected from among themselves in the mode to be fixed by the by-laws.

Art. 64. The members of the General Traffic Council are appointed by decree of the Minister of Public Works.

They shall remain in office during four years ; at the expiration of this term the persons mentioned in paragraphs (b) and (c) may be reappointed ; all other members are re-eligible only after two years.

Art. 65. The General Traffic Council shall convene normally once every three months, and shall be called from time to time by the Chairman, who may call extraordinary meetings whenever special urgent questions are to be treated.

The decisions shall be deemed valid when at least two-thirds of the membership shall be present, and the majority of the votes shall equal at least one-third of the total number of the membership of the Council. In the case of a tie vote the Chairman shall cast the deciding vote.

Art. 66. From the General Council, special committees may be elected to which the Chairman or the Council itself may refer the investigation of special matters and the preparation of opinions thereon.

Art. 67. The Compartmental Traffic Committees are called to give opinions, pass resolutions, and make investigations on the subjects of tariffs, local time-schedules, and the needs of traffic in the compartment.

Art. 68. The Compartmental Traffic Commission has as its Chairman the Chief of the Compartmental Direction, and is composed of the following members :

(a) Two officials of the Compartmental Direction designated by the Director-General.

(b) Four local representatives of industry, commerce, and agriculture, two of whom shall be elected by the Chambers of Commerce and two by the Agricultural Committees of the provinces within the territory of the compartment.

(c) Two members chosen by the Minister of Public Works from amongst persons outside the service but familiar with railway matters.

Art. 69. The Compartmental Committees shall pass their

resolutions by an absolute majority vote of those present, and in case of a tie vote, the Chairman shall cast the decisive vote.

Art. 70. The members of the Compartmental Committees shall remain in office two years, those in class *a* may be re-appointed, those in classes *b* and *c* may be elected or re-appointed not sooner than one year after the expiration of the previous term.

Art. 71. No substitution of the members of the General Council not belonging to classes *b* and *c*, or of members of the Compartmental Committees outside the railway administration, is permitted.

CHAPTER VII. PARLIAMENTARY SUPERVISORY COMMITTEE

Art. 72. A permanent parliamentary Committee of supervision over the State railway administration shall be chosen.

This Committee shall be composed of six senators and six deputies chosen by the respective chambers for a term of three years. In case of dissolution of the Chamber of Deputies, the members so chosen shall continue their work in committee until the election of a new membership.

The Supervisory Committee elects its Chairman and Secretary from amongst its own members.

The Committee shall supervise the work of the railway administration and management, and shall bring to the notice of Parliament the respective needs and deficiencies of the railway service.

Art. 73. The Supervisory Committee shall examine and discuss the half-yearly reports which shall be forwarded to it by the General Direction of State railways.

The Committee has the power to make all investigations and observations which it may deem expedient with a view to ascertaining the conditions of the service.

Art. 74. The Committee shall submit to Parliament its yearly report in November of each year.

Art. 75. Members of the Parliamentary Supervisory Committee shall not be members of the Administrative Council nor of the General Traffic Council nor of the Compartmental Traffic Committees mentioned in Arts. 4, 61, and 68 of this law.

CHAPTER VIII. VARIOUS AND TEMPORARY PROVISIONS

Art. 76. For all works occurring on railways operated by the State, whenever the property to be expropriated shall be located within a zone not exceeding fifty metres from the right of way (confine) of the railway, the character of public utility shall be proclaimed by decree of the Minister of Public Works after approval of the respective project by the Administrative Council of the State railways.

In cases where the property to be expropriated extends beyond the limits mentioned, the character of public utility of the work required for the railways operated by the State shall be proclaimed by decree of the Minister of Public Works after a hearing by the State Council and after approval of the respective projects by the Administrative Council of the State railways.

All works occurring on railways operated by the State may, after a hearing of the Administrative Council of the railways, be declared by decree of the Minister of Public Works of an urgent character not permitting of delay, in accordance with Art. 71 of the law of June 25, 1865, No. 2359, modified by law of December 18, 1879, No. 5188.

Art. 77. In matters of expropriations for works on existing lines as well as for new railway constructions, the provisions of Arts. 12 and 13 of the law of January 15, 1885, No. 2892, regarding the sanitary reconstruction of the city of Naples shall apply.

In those cases, however, where special legal provisions more favourable to the expropriating administration are in force, these provisions shall be made applicable also to expropriations effected in the interest of the State railway administration.

The above provisions are applicable also to the expropriation for the construction of new railways conceded to private industry and subventioned by the State.

Art. 78. The administration, under the immediate dependence of the Minister of Public Works, shall have charge of the investigation, the direction, and surveillance of works for new railways to be constructed on direct account of the State. These duties shall not be part of the autonomous management of the railways.

The expenditures under this head are defrayed out of

funds appropriated in the budget of the Ministry of Public Works.

The works for the construction of new railways shall be executed, liquidated, and audited by the above-named administration, with the application however of the normal rules in force for other public works of the State.

Art. 79. The Law Division of the State railway administration is charged with the legal advice, the representation, and the defence in litigations, in all controversies arising from contracts for transportation and acts, decisions and contracts of labour and supplies relating to the operation of the railways, in law suits regarding responsibility for damages suffered by third persons in this service, as well as in litigations relating to rights and obligations of the railway employees.

All other litigations affecting the State railways devolve upon the Royal Treasury attorneys who attend to these matters together with others affecting other branches of the State administration.

Whenever doubt arises about the respective jurisdictions between the office of the Royal treasury attorneys and the Law Division of the railways, the matter is decided by agreement between the Ministers of the Treasury and of Public Works, after the opinions of the Attorney-General of the Treasury and the Railway administration have been heard.

Whenever action or suit has been brought against the State administration, both in its quality of operating and owning entity, the defence shall be entrusted to the Royal Treasury attorneys, who shall seek proper advice from the Law Division of the railway administration.

Challenges of the legality of representation before court shall be made under penalty of invalidity before the Court of the First Instance and before the merits of the case have been entered.

After their official connection has been proved the officials belonging to the Law Division of the railway administration need no special authorization to assume the legal representation of the State railways before any court or office of the kingdom.

Art. 80. At the seats of the Compartmental offices the legal defence of the administration shall as a rule be entrusted to the officials of the Law Division.

Outside the seats of the offices named, the legal representation in actions on suits affecting the State railways may be entrusted to deputies inscribed on a special roster which shall

be prepared for each seat of the Courts of Lower Instance, Courts of Appeals, or Courts of Cassation. The conduct of the respective cases may be continued before the higher courts by the deputy to whom the case was entrusted from the beginning.

The roster of the deputy attorneys in accordance with the present law shall be approved by the Administrative Council upon the advice of a Committee for each seat of the Compartment.

Said Committee shall be composed of its first President, and the Procurator-General of the Court of Appeals, the Royal Treasury Attorney, the President of the local council of the Bar Association, and the Chief of the Law Division of the local Compartmental railway administration.

Deputy attorneys in the railway service or deputy attorneys of the Treasury, who shall be deemed more competent for the legal representation in railway suits shall be preferred for said roster. The number of names to be entered upon the roster shall be determined upon the advice of the above-named Committee and in proportion to the needs of the service. In case of vacancies public notice thereof shall be given.

The rules applying to the legal representation of all other branches of the State Administration are extended to the railway administration, particularly in the following regards: the prohibition as to the bringing of action against other branches of the State Administration; the relation of subordination to the delegating office; the obligation to accept the payment of fees within amounts fixed by the delegating office.

The chiefs of the Law Division shall select for each case among those persons who are inscribed in the roster, a deputy attorney to conduct each particular case not to be conducted by the office itself. Due regard shall be had to the relative fitness and the equitable distribution of cases.

At the proposal of the State railway administration, the Minister of Public Works may engage attorneys in private practice to conduct cases of exceptional importance.

Members of Parliament shall be incapacitated for assuming such functions, nor shall their names be inscribed on the roster of deputies.

Art. 81. The railway administration shall, within one year from the publication of the present law, proceed to the reorganization of the offices of the law service. The required personnel shall be chosen from amongst the employees of the

existing offices of the law departments of the railways who, besides certificates of graduation from law faculties, shall possess the qualifications required by the law of June 8, 1874, No. 1938, for the practise of the profession of attorney and councillor, together with the necessary capacity for the discharge of the forensic functions. Those employees who shall not be or become possessed within said year of said requirements shall be transferred to other offices.

Positions made vacant as the result of the above reorganization shall be filled either by means of public competition mentioned in the subsequent (last but one) paragraph, or by selection in accordance with the rules to be formulated by the laws from among the staff of the office of the Royal Treasury attorneys or from among the staff of the State attorneys or the Justices of the lower courts (pretori) and adjoints of the tribunals.

The Chief of the Law Department to the General Direction and the Chiefs of the Law Divisions at the compartmental local offices, shall on the occasion of reorganization mentioned in the present article be appointed by selection from the officers mentioned in the preceding paragraph and the employees of the then existing offices.

Selection shall be made from officials who have followed the profession of law and who possess special merits recognized by the Administrative Council.

No regard shall be had to the length of time they have been in the service ; in case no available candidate can be found, selection shall be made by special competition.

For the purpose of completing the service register and the filling of vacancies that may occur in the future, appointments shall be made by means of competition on the strength of graduation certificates and examinations from among the graduates of the law faculties not older than thirty-five years, whose names shall have been inscribed at least one year in the list of attorneys or councillors practising before the higher or lower courts of the kingdom and who shall have actually practised the profession of law.

A Royal decree passed with the advice of the Administrative and State Councils shall fix the rules for the reorganization and the working of the law service of the railways. This decree shall also fix the rules for the collection and distribution among the officials of the fees payable by litigants.

Art. 82. The medical service of the State railway administra-

tion shall be part of the General Direction. The medical personnel shall be located at the seats of the Compartmental administrations and shall have charge of the hygienic control, of consultations, the examinations with regard to the physical fitness of the personnel, also of inspections in accordance with the respective by-laws.

The physicians in charge of sections, consulting physicians, specialists, and assistant physicians, shall not have the qualifications of public officials. The section physicians shall be recommended for appointments by a special commission for each compartment composed of the following persons: the chief of the Compartmental administration, the chief of the local health office, two professors of the medical and surgical clinics at the local or neighbouring university, chosen preferably from amongst the consulting railway physicians and the medical officer of the province where the seat of the compartment is located.

The compensation for services rendered by physicians in charge of the service on the line shall consist only in the grant of a pass for the gratuitous travel on certain sections beside the grant of free tickets accorded to railway employees and their families in accordance with Art. 83. In cases of special difficulties of the service either in the great railway centres or in the malarial sections a special adequate compensation may be granted.

Physicians who have rendered satisfactory service for a period of not less than ten years, may after retirement preserve the privilege of gratuitous travel and of free tickets mentioned above for a proportional period to be fixed in the by-laws.

The appointment, terms of service, the conditions of discharge and dismissal, the functions and the respective compensations of the above-named physicians, as well as of the consulting physicians and specialists, shall be regulated by the respective by-laws to be promulgated by decree of the Minister of Public Works upon the advice of the Administrative Council of the interested retirement and superannuation funds, the General Health Office of the kingdom, and the Administrative Council of the State railways.

Art. 83. Passes for free travel and tickets for a single service trip shall be granted only to the personnel of the State railway administration and to Government inspectors when travelling on railways conceded to private industry in cases required by

their respective duties, also to State officials who by reason of their official relations to the State railways have to make frequent trips over these railways.

Tickets for a single trip shall be granted only to the employees of the State railway administration and to persons charged with the inspection of railways and to the respective families of these officials in accordance with the rules promulgated in the by-laws.

Retired officials (and their families) of the State railway administration, of the inspection service of the railways conceded to private industry, also retired officials of the former companies operating the Mediterranean, Adriatic, and Sicilian systems, also those who served in the Royal General Inspectorate of Railways, have the right each year to one gratuitous ticket and one at reduced rates.

The by-laws shall also determine to which class of retired officials of the higher grades who shall have served with the above-named administrations, may be granted in addition passes for gratuitous travel.

Exchanges of privileged travel may be effected with other railway administrations and with important navigation companies.

All other grants of free tickets and of tickets at reduced rates shall be regulated by Royal decree, the latter to be presented to Parliament to be given force of law.

Apart from criminal action, the officials who unduly dispose of passes of free travel, free tickets, or tickets at reduced rates, shall be suspended from office with loss of salary from ten days to a month, and shall pay the price at normal rates of the ticket disposed of. In case of repetition of the offence, the guilty official shall be discharged from the service.

Art. 84. Members of the General Traffic Council and members of the Compartmental Committees, the latter however only on lines comprised within their respective compartments, shall have the right to a pass of free travel on the State railways.

Members of the General Traffic Council who do not reside in the capital of the kingdom are entitled moreover to a per diem compensation of 20 lire and members of the Compartmental Committees, who do not reside in the cities where the Compartmental administrations are located, to a per diem compensation of 15 lire.

Art. 85. Parliament in both its branches shall in the first sittings, following the publication of the present law,

proceed to the selection of the members of the Supervisory Committee.

The powers of the existing Administrative Council shall cease within two months after the publication of the present law; a new Council of Administration shall then be constituted which shall enter upon the duties immediately.

The General Traffic Council and its Compartmental Traffic Committees shall be organized within the periods mentioned above in accordance with the provisions of Art. 63.

A Royal decree shall state the dates from which the intervals mentioned in Arts. 53 and 59 of the present law shall be counted.

These dates shall not be later than eight months from the publication of the present law.

Art. 86. A Royal decree based upon the advice of the Administrative Council of the railways, the State Council, and the Cabinet Council, shall sanction the general by-laws for the execution of the present law.

Art. 87. The laws of April 22, 1905, No. 137, and of July 12, 1908, No. 332, and all other laws and legal enactments relative to the State operation of railways in so far as they are contrary to the present law, are hereby repealed.

Art. 88. A Royal decree, based upon the advice of the State Council and the Cabinet Council, shall provide for the consolidation of the present law and the enactments of former laws still in force.

We hereby order that the present law, after the seal of State has been affixed to it, be inserted in the Official Collection of Laws and Decrees of the Kingdom of Italy, and further announce it as our will that it shall have the force of law of the State.

Given at Rome on the 7th day of July, 1907.

VITTORIO EMANUELE.

GIANTURCO.

CARCANO.

COCCO-ORTU.

V. E. ORLANDO.

LACAVA.

Guard of the Seal: ORLANDO.

INDEX

- Accidents, *see* Safety in railway travel, and Railway accidents, &c.
- Accounts, system followed on Swiss railways, 301-14.
- Acworth, W. M., 39 n.; his opinion on state purchase of English railways, 3; his example from experience of Great Eastern Railway of government regulation, 38; on English freight rates, 67; his comparison of safety of English and American railways, 183.
- Adams, A. D., on the question of rates in the Granger cases, 20.
- Adams, Prof. H. C., comparison of American and Prussian rates by, 138-9.
- Air-brake, 43, 188, 190.
- Alton Deal, the, 40.
- Amalgamated Copper Company, 258.
- American Bar Association, 10.
- American Railroad Employees and Industrial Investors' Association, 272 n.
- American railways, speed of compared with that of Prussian, 123-4; high freight rates on, 136-9; high percentage of accidents on, 183-5; travel on increasingly dangerous, 186; demoralization of north-west railways in 1906, 208.
- American railway corruption, 235-64; commercial corruption, 235; financial corruption, 245; indefensible financing, 247; administration graft, 249; railway influence with the judiciary, 251, 255, 256; California and the Southern Pacific, 254; political corruption, 258; conclusions, 261.
- American Social Science Association, 259.
- American Statistical Association, 184.
- Amidon, Judge C. F., his argument in favour of transfer to Federal government of state powers of railway regulation, 10.
- Australia, state-ownership of railways in, 94.
- Austria, state-ownership of railways in, 94; legal controversy with Bavarian citizens, 287-8.
- Automatic bells, 199.
- 'Automatic block' system, 191, 201.
- Automatic coupler, 43, 188.
- Bahrs, Judge, 254, 255.
- Beatty, Chief Justice, 255.
- Beaulieu, Paul Leroy, on the purchase of French state railways, 175.
- Belgian railways, state-ownership of, 80, 81, 83, 87, 90 *passim*; low freight rates on, 81-4, 87; superiority of state-owned lines, 128; position of employees on, 133; passenger and freight rates on, 149-58; financial results of, 176-80; great benefit of to country, 179; accidents on, 185; hours of labour on, 197; no corruption in connection with, 220; method of choosing applicants for employment on, 266-8; promotion on, 270.
- Belloche, Monsieur, 286.
- Berthelemy, Professor, on French railway rates, 145.
- Bertrand, Hon. M., on competition between private and state-owned railways, 150.
- Bismarck, Prince, guides the government purchase of Prussian railways, 104.

- Blackstone, Pres. T. B., 246.
 Block system, the, 190, 193-5, 198, 201.
 Board of Trade (American), 190.
 Board of Trade (English), 67 ; interference of in railway rates, 38, 39 ; regulates hours of labour of railway servants, 197.
 Bradford, E. S., on the quality of service of Prussian state railways, 122.
 Brakemen, 189, 195.
 Brooks, John Graham, on the extent to which railways control politics, 259.
 Brussels, Liberal University of, 268.
 Bryan, W. J., letter in support of, on government ownership of railroads, 5, 6 ; supports proposal that Interstate Commerce Commission be allowed to value railroads of United States, 48 ; his plan for national supervision of issue of railroad stocks and bonds, &c., 50 ; his suggestion to keep railroad stocks at par, 59 ; in what way his railway policy differs from Mr. Roosevelt's, 91, 92.
Buell v. Chicago, Milwaukee and St. Paul Railroad, 26 n.
 Bundesrath, Swiss, discussion for purchase of railways in, 113, 114.
 Bureau of Statistics and Accounts, 41, 43, 44.
 Burns, Right Hon. John, on the question of government ownership in England, 47.
 Capitalization, national control of, 50 ; fictitious capitalization source of high rates, &c., 51.
 Chamber of Representatives (Belgian), 177.
 Chapuis, Monsieur, 146 n., 147 n.
Chicago, &c. Railway Co. v. Minnesota, 20.
 Clay, Senator, on growth of public sentiment in favour of government ownership of railroads, 7.
 Clemenceau, G., on state-ownership of French railways, 88.
 Coal Carrying Roads, the, 40.
 Colson, C., his statement on management of French state railways, 174.
 Comité Consultatif des Chemins de Fer, 57.
 Commissioner of Corporations, 236.
 Competition, railway, needless duplication of tracks caused by, 48, 68, 69.
 Conductors, 189, 195, 199, 263.
 Congress, future railway legislation of, 37, 41 ; legislation for safety of employees and public, 43, 44 ; legislation on railway rates, 54 ; proposal that it should limit profits of railroads, 59 ; Bill for purchase of Panama railway in, 119 ; grant of money from, for experiments with automatic devices for prevention of collisions, 196 ; no time to legislate on minor railway matters, 200 ; report of Interstate Commerce Commission to on administration graft, 249.
 Cooley, Judge, on influence of railways in politics, 258.
Covington, &c. v. Sandford, 21.
Cutting v. Goddard, 20, 21.
 Deligny, P., 105 n., 291.
 Democrats, 5, 30, 67, 251.
 Denmark, state-ownership of railways in, 94.
 Department of Prosecutions, 42.
 Department of Royal Inspection (Italian), 74.
 Dispatchers, 189, 197.
 Division of Safety Appliances, 44.
 Dixon, Professor F. H., on results of Iowa railway regulation, 12.
 Doten, C. W., his statistics on dangers of railway travel, 184.
 Dunning, J. E., United States Consul at Milan, on the shortcomings of Italian corporation railways, 125-7 ; on financial results of Italian state management, 169, 172.

- Electric alarm-bell, 191.
- Employees, position of, on Swiss railways, 117, 130-1; on Prussian state railways, 129; on Italian state railways, 131-2; on Belgian state railways, 133; on French state railways, 284; results of nationalization to, 129; method of choosing, on Belgian railways, 266-8; on Swiss railways, 272; on Prussian railways, 273, 274; attempted coercion of on English line, 270.
- English railway regulation, 67-9, 215.
- English railways, high freight rates on, 47, 67, 68, 139; accidents on, 184, 185; careful provision made for guarding crossings on, 188; block system on, 193; regulation of for safety of passengers, 215; corruption in connection with, 222; attempted coercion of employees on, 270.
- European railway corruption, 218-34; Russian and Italian, 218; Belgian, 220; English, 222; Prussian, 227; Swiss, 232.
- Federal Railway Commission, 31, 32.
- Federal regulation, proposals for, 11; present status of, 33-45; helpful versus harmful railway regulation, 34; basic principles, 37; present status of Federal Commission, 40; proposed reforms in, 46-65; railway valuation, 48; national control of capitalization, 50; rate regulation, 51; a thorough-going investigation required, 60.
- Financial results of Government ownership, 159-80.
- Finley, W. W., his address to New York Tariff Club, on Government ownership, 3, 4.
- Firemen, 189.
- Fish, Stuyvesant, on regulation by Congress of transportation with in the several states, 10.
- Flagmen, 191, 192, 199.
- Francis, J., 226 n., 227.
- Freight rates, 13, 18, 27, 35, 38, 39, 40, 51-60, 82-3, 134-58.
- French Northern railway, comparison of freight rates with those of Belgian state system, 151-8.
- French railway regulation, 76-84, 214.
- French railways, the high-water mark of European efforts at state regulation, 77; high freight rates on, 56-8, 81-4, 87, 144-9; passenger rates, 145; financial results of, 173-6; hours of labour on, 197; administration of, 283.
- 'Fulton Bill,' the, 53.
- Gand, State University of, 268.
- Gate-men, 191, 192.
- Georgia Railroad (the 'Old Reliable'), dangerous state of track, 209; commission on, 209-13.
- Georgia Railroad Commission, 25, 209-13.
- German financial crisis of 1900-1, 229.
- German railways, state-ownership of, 61, 81-3, 86, 87, 90; low freight rates on, 81, 83, 137-9; accidents on, 184-5.
- Gibb, Sir G. S., 69 n.
- Government by Commission, dangers of, 30.
- Government control of private railways, failure of, 89, 297.
- Government ownership of railways, the case for in America, 2-9, 91-7; sentiment in favour of steadily on increase in United States, 60, 96; the policy of Mr. Bryan and Mr. Roosevelt concerning government ownership, 91-2; quantity and quality of service, 121; results to employees, 129; rates, 135; Swiss rates, 140; Italian rates, 142; French rates, 144; Belgian rates, 149; comparison of Belgian state system with French Northern line, 151; financial results, 159:—of Prussian state

- railways, 160; of Swiss state railways, 162; of Italian state railways, 167; of French state line, 173; of Belgian state railways, 176: conclusions, 180; more successful than under private management, 181; dangers of too sudden transfer from private ownership, 292; advantages of over private railways, 293; objections to, 294; stability of rates under, 296; the great advantage of is the emancipation of the people from tyranny of railway magnates, 297.
- Grab-irons, 43.
- Grade crossings, 188, 190.
- Graft, 40, 221, 233, 235, 249, 261, 293.
- Granger legislation, 35; lessons of the movement, 3; view that it had an injurious effect on railroads, 11; the superstition now exploded, 12, 14-17; cases in the courts, 20, 21.
- 'Guesde, Citoyen,' leader of 'unified Socialists' in France against government, 88.
- Hadley, A. T., President of Yale University, 11 n., 24 n., 151 n.; his warning on the question of government railway ownership, 2; his criticism of railway regulation, 58; commendation of Prussian railway civil service, 273.
- Haguet, H., 163 n.; his opinion of the purchase of Swiss railways by state, 162-3, 165.
- Haines, H. S., resumé of evidence secured by Interstate Commerce Commission on administration graft, 249, 251.
- Harriman, E. H., 246, 247, 248.
- 'Harriman case,' the, 41, 95 n.
- Harris v. The Great Northern Railway Company*, 256.
- Haskell, F. W., on the violation of the block system on American railways, 194.
- Hecht, Dr. F., 230, 232 n.
- Helleputte, Hon. M., on the purchase of the Belgian railways by the state, 128.
- Hepburn Bill, 54, 236.
- High finance, in France, 78, 81, 99; in Belgium, 99, 220.
- Hill, J. J., on dangers of American railway travel, 182; the courts and his railway, 256.
- Hoff and Schwabach, Messrs., 186; on the superiority in speed and reliability of Prussian trains over American, 123-4, 186; visit to America to study railway system, 136; on difference between American and German rates, 137; demonstrate dangers of travel on American railways, 184.
- 'Hours of Labour Law,' 43, 44.
- Huebner, G. G., 20 n.; on the quality of service of Prussian state railways, 123.
- Hungary, state-ownership of railways in, 94; accidents on, 185.
- Illinois railway law, 17.
- Industrial State, the, 277-91; Swiss state railway administration, 280; Italian state railway administration, 172, 282; French state railway administration, 283; judicial decisions as to legal status of, 284.
- Interstate Commerce Act, 33 n.
- Interstate Commerce Commission, 31, 32, 35, 40-4, 46, 48, 51, 52, 56, 95, 137, 138, 187, 188, 191, 193, 196, 198, 199, 200, 201, 208, 213, 236, 237, 238, 239, 240, 242, 246, 249, 258.
- Iowa railway law, 17.
- Iowa State Railway Commission, 137.
- Italian railway regulation, 73-6.
- Italian railways, state-ownership of, 61-3; the chaos at beginning of state-ownership, 62, 63, 76, 207-8; improvements under state-ownership, 125-7; position of employees on, 132; passenger and freight rates on, 142-4;

- financial results of, 167-73; corruption in connection with, 218; administration of state railways, 282; law as to state operation of, 332-68.
- Italian State Railway Administration, 172, 282.
- Japan, state-ownership of railways in, 94; accidents on, compared with private railways, 190.
- Jenks, Professor, on the influence of railways on politics, 259.
- Johnson, Professor E. R., on the effect of the Granger laws on railways, 12.
- Judiciary, the, key to effective state control of interstate traffic in hands of, 21; railway influence with, 251-8.
- Kaufman, R., French railway policy, 103.
- Kinsman automatic stop, 195.
- Labour, conditions of, 197.
- La Follette, Senator, his examination of rates fixed by 'Potter law', 12-14; analysis of railway statistics by, 15; discredits supposed effects of Granger legislation, 15-17; his demonstration of value of state railway regulation in Iowa and Illinois, 18; champions 'Hours of Labour law', 43, 197; advocates valuation of railways by Interstate Commerce Commission, 48.
- Lamartine, A. de, 90 n.; his warning that private railway companies would fetter the government of France, 299-300.
- Lane, Commissioner Franklin, on American financial railway corruption, 246-8.
- Larrabee, Ex-Governor, on effect free railway passes are supposed to exert on judiciary, 252-3.
- Leon, Paul, 84 n.
- Leroy, M., on present operation of French state railways, 175.
- Liege, State University of, 268.
- Lloyd, Henry D., exposes discrimination of rates in favour of Standard Oil Company, 234.
- Lodge, Senator H. C., letter on government ownership of railroads, 6.
- Louvain, Catholic University of, 268.
- Martin, Justice D., railway opposition to on renomination for Kansas Supreme Court, 251, 252.
- Meyer, B. H., Professor of Railway Economics at University of Wisconsin, 29 n., 105 n., 262; on purchase of Swiss railways by state, 114, 115; on financial results of purchase of Prussian railways by state, 162; on railway corruption, 227-8.
- Mexico, state-ownership of railways in, 94.
- Michigan, valuation of railway property by state of, 49.
- Milhaud, Professor E., 176 n.; his analysis of financial result of Swiss state-ownership of railways, 164-5.
- 'Minnesota case,' the, 37.
- Minnesota railway law, 17.
- Minnesota, state of, valuation of railways by, 49.
- Moseley, E. A., 44.
- Munn v. Illinois*, 20.
- Natal, state-ownership of railways in, 94.
- National industries, encouraged by state-owned railways, 81-4, 222.
- Newlands, Senator, advocates valuation of railways by Interstate Commerce Commission, 48; his proposal for limitation of railway profits, 59; questions of in Senate Hearings, 238, 240-3.
- New York State Railroad Commission, 23-31.
- New York Traffic Club, 3.
- New Zealand, state-ownership of railways in, 94.
- 'North Carolina case,' the, 37.
- Norway and Sweden, state-ownership of railways in, 94.

Olney, R., letter in support of W. J. Bryan, on government ownership of railways, 5, 6.
Open switch, the, 196.

Panama railway, 119.

Parsons, Professor Frank, on the government purchase of Prussian railways, 110; on the danger of railway travel in United States, 183-4; case of corruption on Swiss railways mentioned by, 233; on commercial railway corruption in United States, 235; on railway political corruption, 258; case of attempted coercion of railway employees quoted by, 270; on the working of the Prussian state railways, 273-4.

Passenger rates, 35, 140-2, 144, 145, 254.

Paternoster, Mr., 287.

Payne, W., on financial railway corruption in America, 246.

Pennsylvania, University of, 12.

Phinizy, B., petition of on state of Georgia railway track, 209-11.

Picard, Monsieur, 109.

Plichon, Monsieur, on present operation of French state railways, 175.

Politics, influence of railways on, 89, 197, 227, 251, 258-61, 265.

'Potter law,' analysis of rates fixed by, 13, 14.

Pratt, E. A., 58 n.

Prevot, C., 149.

Prouty, Commissioner C. A., comparison of American and Prussian railway rates by, 137-8; testimony of concerning railway rates before Interstate Commerce Commission, 237-43.

Prussian railways, state revenue from taxes on, 85-7, 160, 277; method of purchasing by state, 104; improved service under state management, 122-4; position of employees on, 130; freight rates on, 135-9; financial results of, 160-2; accidents on compared with American

railways, 184; hours of labour on, 197; no corruption in connection with, 227; requirements of candidates for higher positions on, 272-3.

Punctuality of trains, American compared with German, 124.

Railway accidents, ultimate issue involved in, 205-17; homicidal economies must stop, 206; an appalling situation, 207; a decadent railway, 209; the heart of the problem, 213.

Railway attorneys and lobbyists, 23, 251.

Railway commissioners, importance of expert knowledge by, 22.

Railway control, by experts, 22, 23, 30, 31.

Railway nationalization, not confiscatory, 98-120; an example from Belgium, 99; a complicated and difficult problem, 101; the example of France, 103; Prussian methods of purchase, 104; the example of Switzerland, 110; the problem in the United States, 119.

Railway rates, unregulated, are unscientific and illogical, 26; Wisconsin Commission's important contribution to scientific rate-making, 26; influence of Interstate Commerce Commission on, 40, 52-5; comparison of German and American, 135-7. *See also* Government ownership, results of.

Railway regulation, in United States, 10-32; in Iowa and Illinois, 18; in Texas, 19; Wisconsin and New York Commissions, 23; varieties of, 66-97; experience of England, 67; experience of Switzerland, 69; the Italian brand, 73; French experience, 76; theory of French system, 77; advantages of French system, 79; disadvantages of French system, 81; state revenue from railway taxes, 85; why regulation fails,

- 89; the American situation, 91.
- Railway taxes, state revenue from, 85-7, 160-2, 277.
- Railway Traffic Associations, 46.
- Railway valuation, 48-50.
- Rate Bill, 35, 44.
- Rate regulation, 51-60.
- Regnier, M., 145 n., 173 n.; on freight rates of French state lines, 146.
- Renkin, Hon. M., 150; his report on budget of the Belgian state railways, 152; a bitter adversary of state management of railways, 154; his comparison of profits of French Northern line and Belgian system, 155-7.
- Ripley, Prof. W. Z., 20 n.
- Roosevelt, Theodore, 5; his attitude on government ownership of railways, 6, 7; 'pernicious activity' of on behalf of rate bill, 33, 34; advocated formation of Railway Traffic Associations, 46; supports proposal that Interstate Commerce Commission be allowed to value railways of United States, 48; his proposal for national incorporation of all railways doing an interstate business, 50; leads regulationists who demand positive and constructive railway legislation, 73; difference of his railway policy from that of W. J. Bryan, 91-2; may yet be forced to participate in movement for government ownership of railroads, 93; holds that railroad managers should co-operate with government on question of railway regulation, 94.
- Root, Judge M. A., 256.
- Royal Italian Railway Commission, 75.
- Russia, state-ownership of railways in, 94; corruption in connection with, 218.
- Safety in railway travel, 182; can Americans afford safety? 182-204; accidents in America and Europe, 183; travel in United States increasingly dangerous, 186; vigorous legislative action needed, 188; deaths and injuries of trainmen for thirteen years, 189; grade crossings, 190; the block system, 193; conditions of labour, 197; reform measures demanded, 199; the cost of safety, 200; cost of improvements not all loss, 202; where the money is to come from, 203.
- Safety Appliance Law, 43, 44.
- Say, L., his diatribe on purchase of French state railways, 174-5.
- Sembat, Deputy Marcel, 285.
- Senate Committee on Interstate Commerce, 53, 119, 228.
- Shaw, Albert, on American railway financing, 248.
- 'Sherman' Anti-Trust Act, 35, 46.
- Shippers, unfair treatment of by railways, 41; English shipper pays highest rates in Europe, 47, 68; requirements of law inflicts hardships on, 53; impartiality of French railway regulation to, 79; discrimination between large and small on Belgian lines, 149-50; illegal advantages of on American lines, 237-44.
- Smyth v. Ames*, 21.
- Socialists, and state-ownership of railways, 61, 88, 101, 207, 220, 267.
- South Africa, state-ownership of railways in, 94.
- Speed, of American and German trains, 123-4, 186.
- Spencer, Herbert, on railway corruption in England, 223-6, 227.
- Spoils system, the, and state railways, 265-76.
- Standard Oil Company, 235, 236, 243.
- State Bar Association, 256.
- Steel Trust, 26.
- Stickney, Pres. A. B., on the practice of granting secret rates to shippers, 243-4.
- St. Louis South-Western Traffic Committee, 239.

- Supreme Court of United States, 29, 37, 41, 54, 55.
- Swiss Federal Railway Administration, 167, 279.
- Swiss railway regulation, 69-73.
- Swiss railways, state-ownership of, 69-73, 90; method of purchasing by state, 111; improvements under state-management, 124; position of employees on, 130-1; passenger and freight rates on, 140-2; financial results of, 162-7; no corruption in connection with, 232; method of choosing employees, 271; general principles of organization of, 278-9; administration of, 281; law on system of accounts to be followed by, 301-14; law as to acquisition and administration of, 315-31.
- Switchmen, 189, 191.
- Sylvia, Mademoiselle, 285.
- Taft, President W. H., his hostility to government ownership of railways, 5, 6, 7.
- Tajani, Ing. F., 142 n.; author of work on Italian railways, 170.
- Taussig, Professor F. W., on the results of Prussian state-ownership of railways, 274-5.
- Telegraph operators, 197, 198.
- Texas, railway regulation in, 19; the pioneer state in matter of railway valuation, 49.
- Track inspectors, 191.
- 'Train staff' system, 193.
- Trainmen, table of deaths and injuries to for thirteen years, 189; hours of labour of in America, 197.
- United States Industrial Commission, 259.
- United States District Courts, 52.
- University, attitude of professors of, &c., toward railway influence in politics, 260; university education required for higher positions on Prussian railways, 273.
- Vandenpeereboom, Minister, 267.
- Vanderbilt, W. H., phrase of, 216.
- Vanderrydt, M. F., chief engineer of material and traction on Belgian state railways, 153 n.
- Vandervelde, Monsieur, 177 n.; leader of the Belgian Socialist party, 101; speech in the Belgian Chamber on government management of railways, 101.
- Vesser, Monsieur, action of over fusion of Jura Berne and Swiss Occidentale railways, 233-4.
- von Maybach, A., assists Prince Bismarck in government purchase of Prussian railways, 104.
- Wall Street, 51, 214, 216, 295.
- Watered stock, 49, 205, 207, 216, 245, 262.
- Wisconsin railway law, 17; superiority of, 25.
- Wisconsin State Railroad Commission, 12, 19, 23-31, 49, 228.
- Wisconsin, University of, 227.
- Wuarin, A., 287 n.
- Yale, University of, 2.

For a detailed account from month to month of the *actual results* of government operation of railways and other natural monopolies see *Les Annales de la Régie Directe*, published at 8 rue Saint-Victor, Geneva, Switzerland.

This interesting international review already has made a unique place for itself among economic publications by its scientific and business-like way of dealing primarily with concrete *facts* rather than abstract theories.

Subscription, price \$2 a year.

Sample copy sent free on request.

